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RECORDS OF INTESTINAL OBSTRUCTION, WITH ESPECIAL REFERENCE TO SYMPTOMS AND TREATMENT.

(*Continued from page* 256, *Vol. I.*)

We are concerned with the passage of gall-stones in two quite distinct aspects. In the first place, a stone impacted in the common duct may cause pain, sickness, and constipation, and thus simulate obstruction; and in the second, a large stone may plug the intestine and thus become a cause of it.

The first-named group has, I feel sure, not received the attention that it demands. Attacks of bile-stone colic are constantly mistaken for other conditions, and they are far more common than is generally supposed. The symptoms vary very much in different cases, and they often exceed, both in severity, suddenness, and duration, all that seems probable. It has happened to me on many occasions to be called to urgent cases supposed to be abdominal obstruction, in which the diagnosis appeared to me to be bile-stone colic, and in which the subsequent progress confirmed that impression. It is a mistake to believe that the patient is usually able in such cases to locate the pain correctly, and it is a mistake to expect jaundice as an early symptom. It is further an error not to recognize that the severe pain present in these cases may induce a seemingly obstinate constipation. The reflex disturbances as regards vomiting and constipation are, indeed, not to be easily distinguished from those of mechanical

obstruction. In these cases the stone which causes the attack is often not a large one, and it may easily escape recognition in the stool. It is quite possible that in some cases in which it was lodged in the cystic duct it may slip back again. I cannot make the statement that in any large number of the cases to which I have just referred, I have actually proved the presence of a stone, but the sudden subsidence of the pain and the satisfactory recovery of the patient have often seemed to leave but little room for doubt.

To turn to the class of cases in which real obstruction is present, we may ask the question : Is it possible to make the diagnosis of a case in which the small intestine is plugged by a gall-stone ? I maintain that it is not practicable to get further than a mere conjecture. If the case is recent it will count as one of acute intestinal obstruction, and a band or a twist, or some other form of internal strangulation, will be suspected. Such has, I believe, actually been the diagnosis in almost every case in which the abdomen has been opened and a gall-stone found. In particular I may ask attention to one in which the operator was Mr. Bryant, than whom a more careful or experienced diagnostician could not be named. Mr. Bryant states candidly that he had before the operation taken the case to be one of "acute intestinal obstruction due either to a band, twist, or internal hernia."

A differential diagnosis is simply impossible, for the symptoms are the same. There is little to help us excepting the history of an early stage of symptoms referable to the region of the gall-bladder, and this is in many cases—I think in the majority—wholly wanting.

If the duration of the case have been longer, and it have passed into one of chronic obstruction, we still have nothing excepting the history by which to distinguish it from cases due to other causes. Cases of block by hardened fæces and by malignant stricture may each in turn resemble it.

When a gall-stone plugs the intestine it is fixed in most cases in the lower part of the ileum, not far from the cæcum. If it have once passed the valve and gained the colon there is no longer any obstruction, and its passage per anum will

probably soon be accomplished. A point, therefore, in the diagnosis of chronic cases from malignant stricture of the lower bowel is easily made in the fact that colon-distension is absent. Colotomy, which is the suitable resource in the latter, is of course useless in gall-stone plugging. Admitting, then, that a conjectural diagnosis (resting on the history) is in a few cases possible, it may be convenient to discuss the question of treatment under three different heads.

1st.—In a case of acute obstruction where the history points to gall-stone, what ought to be done? We will suppose that the patient's symptoms, the pain, sickness, &c., are urgent. I ask attention first to the fact that—in strong contrast with the dangers of strangulation by band, &c.—there is no risk of gangrene of bowel. The case, although it may appear urgent, is not really so. After all it is only one of block, and will pass into a chronic stage if let alone. It is not one in which speedy death is the only alternative to immediate relief. The probability is very great that even if no artificial aid whatever is employed, the stone will eventually pass. Foreign bodies far larger than gall-stones ever are, and presenting irregularities in their surfaces far more likely to cause difficulty, have in innumerable instances safely traversed the whole course of the intestinal tract. As regards gall-stones themselves, much larger ones have passed than any that have been found by the surgeon in laparotomy operations. Very few indeed are the cases in which at a post-mortem a gall-stone has been found in the small intestine as the cause of death. I have given in the appended plate some outlines of gall-stones in order to illustrate their size in reference to the possibility of their passage. Briefly it may be said that in no case is the stone so large but that its passage is both possible and probable. In Fig. 3 the stone was safely voided. In Fig. 1 the surgeon removed it by laparotomy, and the patient died eight hours after the operation. It will be seen that the stone is not really larger than others which safely passed, and the inference is that if patience had been exercised it might in this case also, without much real danger to life, have eventually come away.

Dr. J. W. Moore, of Dublin, records the case of an elderly woman who safely voided two large calculi after attacks characterized by agonizing pain, only slight jaundice, obstinate and incessant vomiting, and intractable constipation. The largest of these measured two inches and three-quarters in its shortest circumference.

In a second case recorded by Dr. Moore from the practice of Surgeon-Major Hare, of Mooltan, a lady of 43 voided stones on three occasions, after periods of four days' terrible suffering in each instance. The largest of these, which was nearly round, measured two inches in circumference.

In a third case by Dr. Moore, a woman of 47 voided seven large calculi after constipation with violent pain, but without vomiting. The largest weighed more than half an ounce, and had a smaller circumference of nearly two inches.

As regards the measures of treatment to be adopted in case of acute obstruction supposed to be due to gall-stone, I have no hesitation in recommending a combination of opium, anæsthetics, and injections. The condition is one of spasm of the muscular coats of the bowel caused by a foreign body. Excepting for spasm, there is no mechanical reason why the stone should not pass. To allay spasm, then, is our object. This may be done first by full doses of opium, and after these by the use of anæsthetics. Patients under the influence of opium bear chloroform well, and the latter should be used during long periods. No conditions are so likely to favour the slipping onwards of a stone as a prolonged state of full anæsthesia. During it the surgeon will of course take advantage of the relaxation of the abdominal wall to make careful manipulation with a view to diagnosis. He may perhaps be able to feel the stone. He will also freely distend the lower bowel alternately with water and with air. In time, one or the other or both may pass the ileo-cæcal valve, and if distension of the gut immediately below the stone can be accomplished, the latter is almost certain to slip onwards. It may even be desirable with this hope in prospect to inject with olive oil. Or the introduction of olive oil into the stomach in large quantities may be suitably tried.

If after an examination of this kind no relief is obtained, and no definite gain as to diagnosis obtained, it may then, the symptoms being urgent, be quite right to do an explorative laparotomy. There is, indeed, no alternative between this and waiting, and the decision will depend upon the surgeon's individual estimate of the relative dangers of the two. The case is at any rate definitely placed in the category of acute obstruction from unknown cause. As I have supposed that it has been ascertained that no part of the colon is distended by fæces, and that the whole of it receives the injection, it is clear that the cause is placed in the small intestine, and colotomy out of the question.

Let us next ask what ought to be done if a gall-stone in the small intestine have been felt with reasonable certainty. My reply must be unequivocal, I would wait. There is far less danger in trusting to the spontaneous escape of the stone than in attempting its removal by laparotomy. I will go even further than this, and say that if after the surgeon has opened the abdomen and found an impacted gall-stone, I doubt whether he will always do wisely to at once incise the bowel and take it out. I should first try very patiently to squeeze it onwards, should try by injections whether it could not be reached from below, and only as a last expedient allow myself to be tempted to open the gut. The few cases in which the operation has been completed have not given very favourable results. It is not an operation which can possibly be done without some danger of its own.

We have lastly to consider what ought to be done in cases of chronic obstruction which are possibly or probably due to gall-stone plugging. As already stated, emptiness of the ascending and transverse colon is the symptom which will chiefly distinguish these from fæcal blocks with or without organic stricture. Inasmuch as the smaller bowel is involved, the symptoms are likely to be less chronic and somewhat more severe than in the common run of the latter cases. As already repeatedly stated, colotomy, the ordinary resort in these, is here out of the question. The choice rests between a policy of waiting, with use of opium, belladonna, and injections, and an operation (enterotomy or exploration).

My own preference would be for the latter. I have known many cases in which, after prolonged symptoms and considerable suffering, a stone has been eventually voided, and the patient has recovered. In not a few which were, I suspect, of this nature, the stone was never found. In some cases, especially in elderly persons with distended and torpid large intestines, the stone may cease to obstruct and yet remain behind. This was probably the case in an old gentleman whom I attended many years ago with severe symptoms of obstruction. We gave chloroform, and practised the usual manipulations with free and repeated injections, and he was relieved. His bowels acted, and he recovered tolerable health. He had a year later a similar but not so severe an attack, which was relieved by like measures. Finally, six months later still he voided an enormous gallstone.

As an example of one not uncommon class in which gallstone plugging may be suspected, and in which the diagnosis is never made certain, I will quote the following. It is one in which an exploratory operation would certainly have been deemed desirable by those who advocate that measure.

Case I.—*Five days' obstruction with urgent symptoms. Gallstone suspected. Abdominal taxis under an anæsthetic without obvious result, but followed after a short time by complete relief.*

I saw Dr. W—— on Thursday, March 14, 1889, and met Dr. B—— and Mr. L—— in consultation at his bedside. It was the fifth day of his illness, and during the whole of this time, in spite of various treatment, obstipation had been complete. Our patient being a medical man himself, he was able to supply us with a very clear history of his symptoms. He said that he had been in his usual good health until the Sunday preceding my visit (on Thursday). He was accustomed to a daily action of his bowels, and but seldom used aperient medicine. On Friday, however, without any very definite reason, he had taken an aperient pill. This dose acted well on the Saturday morning. On Saturday

night, contrary to his custom, he took a hearty supper. He had some ill-defined abdominal discomfort during the night, and thought that his supper had disagreed with him. On Sunday morning he did not feel well, but got up and went out to see his patients. Whilst walking in the street, he was seized with sickness and obliged to vomit. He came home, found himself quite unable to eat his dinner, and during the afternoon had increasing abdominal discomfort. In the course of the evening it amounted to very severe pain, and he had repeated vomiting. He himself referred to the region of the cæcum as the part where from first to last the pain had been felt. He did not think that he had had any pain over the gall-bladder; but Dr. B——, who had examined his abdomen on the first day, said that there was then distinct tenderness over that region. When asked to describe the exact character of the pain, he said that he could not do more than say that it was very severe, fixed in one place, and easily increased by any movement of the body. He was obliged to carefully accommodate his position and to keep as still as possible. On the Sunday afternoon, when Dr. B—— first saw him, this severe pain, with some vomiting, was the chief symptom, and for its relief hypodermic injections of morphia were used. During the five days which had intervened before I saw him the treatment had been chiefly by belladonna. The pain had been constantly present, but much less severe than at first. There had been nausea throughout, but not much active vomiting. At no time had there been any increase of temperature. Enemata had been freely used, but nothing in the shape of fæces had been brought away; nor, with one slight exception on the afternoon of my visit, had there been any escape of flatus.

Dr. W——'s condition at the time of my visit was as follows:—His tongue was thickly coated, but not dry, and his countenance was anxious and expressive of much discomfort. His abdomen, which was rather fat and large, was not in the least tense, and he allowed me to handle it freely in all directions excepting over the cæcum. In this position he always complained of tenderness when I touched him. I thought I could detect an ill-defined swelling about the size

of a child's fist midway between the anterior spine of the ileum and the linea alba, and it was just over this part that he flinched when touched. The case seemed to me to be one of plugged intestine rather than of strangulation by band. The symptoms had not been so acute, nor had they shown such tendency to increase, as would probably have been the case in the latter. The absence prior to this illness of any tendency to constipation, or of attacks of pain, were facts opposed to the suggestion of malignant stricture. I suggested to him that he might be suffering from a gall-stone impacted in the bowel, to which he at once replied that he had not been a bilious subject, and that he had had no symptoms of the escape of a gall-stone from the gall-bladder. He had no jaundice during the present attack, and had indeed never had anything definite of that kind. He said, however, that he had repeatedly been a little yellow.

Knowing well how frequently all history of bilious attacks is absent in cases of large gall-stones, I did not attach much importance to the negative facts in this instance. It appeared very possible that the early symptoms (severe pain and sickness) might have been those of the passage of the stone from the gall-bladder. The pain was described as having been most acute at that time, and after a while there had come a lull with obstipation only. On the whole, I thought the diagnosis of gall-stone the most probable.

The sequel to this narrative may be very briefly given. Having made adequate preparations as regards assistants, I had my patient (a friend and colleague) placed under chloroform, and then, during more than half an hour, practised the various details of abdominal taxis in full completion. We obtained neither fæces nor flatus, nor was I able to add anything to the facts aiding our diagnosis, excepting that the colon received the injection in very large quantity, and became visibly distended by it. The result was, however, that the bowels acted within a few hours of my leaving the house, and that a satisfactory recovery followed. No gall-stone ever appeared. This is more than a year ago, and my friend remains well.

In the above case, and in some others recently, I used for

injection purposes hydrostatic pressure with a glass tube so inserted, that I could easily see for myself how much pressure was being exerted. The funnel, which was held about eight feet high, was inserted into a large indiarubber tube, and the tube which passed into the bowel was also rubber, but between was two feet of a large bore tube of glass in which the rise or fall of the fluid could be observed. We injected the intestine till the abdomen was as tight as a drum, and kept it so for some minutes at a time. The fluid during these periods of waiting was allowed to sink until the top of the column was visible in the glass tube. By this expedient I made sure that the pressure was adequate, and yet not such as to risk rupture of the bowel. The slightest touch of the hand on the patient's abdomen at once caused the column to rise in the tube, proving, I should suppose, that the pressure was as much as could be suitably employed. The anus was kept closed by the fingers. This might conveniently have been done by a Lund's plug, but the fingers were quite efficient.

With this case we may suitably contrast the two following, in both of which the presence of a gall-stone and of intestinal plugging was made certain. In the first I ask particular attention to the circumstance that there was no history of biliary disorder before the attack. The patient had never had any ailments whatever, and the symptoms set in with such sudden severity that the diagnosis made was that of strangulation by a band. It will be seen that on the fourth day of the illness the symptoms in the two cases were remarkably alike, and the degree of urgency, so far as we can appreciate it from the records, much the same. On this day in the one case the operation was performed, whilst in the other it was not.

CASE II.—*A Gall-stone Case. Acute symptoms supposed to be those of obstruction by a band. Laparotomy—Removal of the Calculus—Death.* (*Clinical Society's Transactions*, vol. xii. p. 106.)

Mrs. R——, æt. 50. Never any illness whatever before.

DATE.	DAY OF ILLNESS.	DETAILS.
Aug. 5	1	Woke in the night with sickness and severe abdominal pain. Vomiting and pain.
,, 6	2	Vomiting and pain; opium given, but rejected.
,, 7	3	
,, 8	4	Seen in the evening by Mr. Bryant. In great pain; much fæcal vomiting; abdomen distended, tender, and tympanitic. No peristalsis. Centre of pain to left of navel.

At this date the patient was removed to Guy's Hospital for operation. A gall-stone was excised from bowel: gut closed by catgut suture. Intestine above punctured at two or three places to give exit to flatus and fluid fæces. Death eight hours after the operation. Acute peritonitis; no fæcal extravasation. The gall-stone had travelled to within a foot of the cæcum. The stone had a circumference of 3¼ inches. (See Fig. I. in Plate.) The stone had probably passed by ulceration from gall-bladder to duodenum. It was a long oval, and weighed 238 grains.

The diagnosis made before the operation was that of "acute intestinal obstruction, which was supposed to be due either to a band twist or internal hernia."

CRITICISM.—*The calculus had taken four days to traverse the length of the small intestine, and was within twelve inches of the cæcum. Had it been let alone a few days longer, it is not impossible that it might have dropped safely into the cæcum and all danger would then have been passed. It must be admitted, however, that it was of very large size.*

Both in this and the following case the vomited matters are described as having been "fæcal" and "stercoraceous." It is almost certain that they could not have come from the large intestine, since the bowel was plugged; and further, inasmuch as the plug had travelled downwards from the duodenum, it had probably made impossible the regurgitation of anything swallowed before the beginning of the attack.

CASE III.—*Case in which a large Gall-stone was passed after twelve days' obstruction. Recovery.* (*Clinical Society's Transactions*, vol. vi. p. 194. Dr. J. S. Gray's case.)

DATE.	DAY OF ILLNESS.	DETAILS.
Dec. 14	1	A man aged 40 was seized with nausea, pain, and vomiting. Pain paroxysmal and referred to navel.
,, 15	2	Seen by Dr. J. S. Gray, the narrator. Pain very violent, vomiting distressing, and matters ejected very offensive.
,, 16	3	Less pain and all the symptoms better, but no action of bowels. He got up and went out.
,, 17	4	Much worse in all respects; vomit stercoraceous; countenance haggard; desponding as to the result; an enema brought away fæces. This was the last motion until 24th.
,, 18	5	The sickness still urgent. Probably the enema had only cleared the bowel below the obstruction.
,, 19	6	Fed by enemata; vomiting and constipation.
,, 20	7	The same.
,, 21	8	The same.
,, 22	9	The same, but less urgent.
,, 23	10	The same.
,, 24	11	The bowels acted spontaneously and freely. The vomiting ceased, and in the course of the evening a large gall-stone escaped.

The stone weighed an ounce and 13 grains, and its smallest circumference was more than two inches.

CRITICISM.—*Here we have an attack of twelve days with obstipation and stercoraceous vomiting the whole time, with the exception that once an enema brought away fæces. On the fourth day the symptoms would have well justified an abdominal exploration* (*compare with preceding case*).

BULLET WOUNDS OF THE ABDOMEN.

(TWO CASES.)

CASE I.—*Bullet wound of Abdomen (Suicidal)—Survival for five days—Absence of the usual symptoms of peritonitis—Perforation of liver, pancreas and kidney.*

I ATTENDED the following case some years ago in consultation with Dr. Hill, of Mecklenburg Square.

An old gentleman of 78, who was in much pecuniary trouble and had once or twice before attempted suicide, finally shot himself in the abdomen with a revolver. He was sitting in a chair at the time, and it appeared that he had lifted up his shirt but not his vest. The ball had entered to the left of the middle line in the upper part of the epigastrium, and was lodged in the soft parts near the tip of the left 12th rib. There was much ecchymosis in the latter position, and a hard substance could be distinctly felt beneath the bruise. I cut down upon it and easily removed the bullet.

The injury had been inflicted at 3 in the morning of a Monday. He was found at 7, in collapse, and almost pulseless. The usual remedies were employed, and when I saw him at 3 o'clock in the afternoon he had much rallied. He was a thin, wiry man of an iron constitution. During the first twelve hours after the accident he repeatedly vomited, and invariably did so after taking anything to drink. The matters ejected were always stained with blood. On several occasions the urine also contained blood, but this was a symptom from which he had suffered several times before. No symptoms of peritonitis followed. The abdomen was almost free from tenderness, and did not during the first three days become distended. We inferred from the sickness and vomiting of blood,

together with the direction which the ball had taken, that the stomach had probably been wounded, although the absence of signs of peritonitis, and the fact that the collapse, instead of increasing, had passed off, seemed to point to an opposite conclusion. We consequently directed that he should be fed solely by enemata, and allowed him to take fluid by the mouth only in teaspoonfuls at a time. He resented this very much, and begged to be allowed to eat and drink.

From the Monday morning on which the accident happened to the Friday, he seemed to be doing well. The temperatures were never above normal, and there was nothing to indicate peritonitis. On the Friday morning he suddenly became alarmingly weak. I saw him on Friday afternoon at 6 o'clock, and then found the abdomen considerably distended. His pulse was very weak. He died on the Saturday morning, having lived a little more than five days.

At the post-mortem we found that there had been no direct injury to the stomach. The ball had passed through the left lobe of the liver, above the lesser curvature of the stomach, and through the pancreas and kidney. It had entered the latter at its hilus, and passed out by a large, ragged opening which would have admitted a finger near the middle of its greatest convexity. There was a good deal of extravasated blood about the viscera which had been wounded, and enough in the peritoneal cavity to thinly coat all the intestines. There were no indications of peritonitis.

It is to be remarked that though the visceral injuries were so severe, yet from the progress during the first four days it had appeared possible that the man would survive. It becomes a question whether it might not have been advisable to have yielded to his entreaties to give food by the mouth more freely. We had forbidden it because it caused him sickness, and from the belief that his stomach was wounded. Upon this latter point, however, some doubt had been expressed from the first on account of the absence of signs of peritonitis, and of extreme collapse. As to the source of the blood which was present in the vomit during the first twelve hours, we could only infer that it had been due to contusion of the stomach, as there was no perforation.

CASE II.—*Bullet wound of Abdomen—Severe symptoms of diffuse peritonitis—Proposed exploration.*

About the same time that I attended the patient whose case is the subject of the preceding note, I saw another which may suitably be placed by its side. I was called late one night to a consultation of the whole surgical staff of the Poplar Hospital, in the case of a ship's captain who had been shot in the abdomen. An American passenger on board the vessel had at the end of his voyage, wishing to unload a pistol, discharged it upwards out of the cabin window. The captain chanced to be walking above, and received the bullet in his abdomen under the navel. There was no clue to the present position of the bullet. It was the third or fourth day after the accident, and all the signs of general peritonitis were present.

When I got to the hospital I found that all preparations had been made for opening the abdomen to search for the bullet. The abdomen was tense, tender, greatly distended, and the symptoms were very urgent. I represented to my colleagues, and particularly to Mr. Brownfield, whose patient the man was, that although it might perhaps be good surgery to explore, yet that the man's condition was such that he might very likely die on the table, and that with such distension as was present it would be very difficult to return the intestines. It seemed probable that some important viscus was wounded, and but little likely that the operator would find it possible to repair the damage. We finally arrived at the conclusion (a rather cowardly one, possibly) not to interfere. My own belief was that the man would not live through the night under any circumstances, and that if his abdomen were once opened he would not live to have it closed again. We continued the treatment by hot poultices and opium which had been previously used.

To my great astonishment I heard from my friend Mr. Brownfield, some weeks later, that this patient had recovered. From the date of the consultation he had begun to improve, and he had since left the hospital quite well, still carrying the bullet with him. I hesitate to quote this case for imitation, or to defend the negative measures for which I was responsible. It is desirable, however, that such facts should not be wholly forgotten.

ON BALANITIS AND ALLIED AFFECTIONS.

No. I.—*A Plea for Circumcision.*

It is surely not needful to seek any recondite motive for the origin of the practice of circumcision. No one who has seen the superior cleanliness of a Hebrew penis can have avoided a very strong impression in favour of the removal of the fore-skin. It constitutes a harbour for filth, and is a constant source of irritation. It conduces to masturbation and adds to the difficulties of sexual continence. It increases the risk of syphilis in early life, and of cancer in the aged. I have never seen cancer of the penis in a Jew, and chancres are rare.

No. II.—*Syphilitic Lupoid affection of the Glans Penis.*

There is an exceedingly troublesome affection of the glans penis which occasionally follows some years after syphilis, and which is, I think, an analogue of lupus. It consists in the development of yellowish-brown spots, which coalesce into patches and spread at their edges. Sometimes they ulcerate and form crusts, but I have never had any trouble with cases in that condition. They always heal quickly under syphilitic treatment and the use of an iodoform ointment. When, however, the patches are perfectly quiet and show only a little thickening and yellow-brown discoloration, then I have found the condition very difficult to influence by either local or internal remedies. In this it much resembles the more chronic forms of psoriasis palmaris as we see them after syphilis.

Two examples of the condition referred to above have impressed themselves upon my memory, and are perhaps worthy of mention as examples of it. The first is that of a married

surgeon who had syphilis many years ago. When he came under my treatment he had for long been perfectly well, with the exception of some yellow-brown lupoid patches, which covered the greater part of his glans and caused him great annoyance. They had once or twice inflamed a little, but for the most part were quite quiet. This gentleman took specifics in varied forms and in full doses during nearly a year. We rubbed in iodoform ointments, oleate of mercury, and mercurial ointments of various composition during most of this time. He submitted, also, on two occasions to a liberal cauterization of the part with the acid nitrate of mercury. We got the disease very much better, but as may be inferred from the length and variety of the treatment, we did not easily or completely cure it. His general health throughout was very good, and he had no other syphilitic manifestations. Although I believe he is now nearly if not quite well, I dare not, with confidence, record a cure.

My second case is that of Count N——, a gentleman of dark complexion and in excellent health.

He came under my care first in 1875, and then suffered from a tuberculo-lupoid eruption on the scalp and on one forearm. He had been treated in Paris three years previously for a "chancre mou," which had left a large and deep scar in the glans penis. I have seen Count N—— on and off from 1875, but during several years of that period he has resided abroad, and his treatment has been much interrupted. He is an excellent patient, but apparently enjoys such vigour of constitution that drugs produce but little effect on him. He has taken at different times large quantities of mercury in various combinations, and with and without iodides. Nothing ever disagrees with him, and he has never had his gums in the least touched. He has not suffered from syphilis on any other part than the skin and glans penis, and on these parts it has always taken the form of a tuberculo-lupoid eruption. This has often been cured for a time, but has shown a remarkable tendency to relapse when the specific treatment has been suspended. My reason for mentioning his case in the present connexion is because the condition referred to affected at one time his glans penis, and proved remarkably obstinate. The

PLATE LVII.

ILLUSTRATIONS OF THE SIZE AND SHAPE OF GALL-STONES.

Fig. 1.—The stone removed by Mr. Bryant in the case quoted at page 10. It measured more than three inches in circumference. It was removed by a laparotomy operation.

Fig. 2.—A stone, which was removed by Mr. Bryant from the gall-bladder of a woman, aged 53. A sinus existed; the concretion could be felt by a probe. The sinus was enlarged, the stone extracted, and the patient made a good recovery (see 'Transactions of the Clinical Society,' vol. xii. p. 20). No jaundice or symptoms of biliary disease had ever occurred.

Fig. 3.—A stone, which was passed per anum by a woman, aged 53, after five days' symptoms of obstruction. The obstruction had been supposed to be due to an umbilical hernia, from which she suffered. She had never in her life had jaundice, nor had there been any attack indicative of the escape of the stone from the gall-bladder to the intestine. The stone had a largest circumference of more than three inches. It was of light sp. gr., but weighed 228 grains. (See 'Medico-Chirurgical Transactions,' vol. vi.)

Figs. 4, 5, & 6.—Are given to illustrate a fatal case of chronic obstruction by gall-stones, and at the same time the great difficulties which attend diagnosis. The patient, a woman, aged 59, died of perforation of the ileum, just above the cæcum, eight months after the probable date of escape of the stones from the gall-bladder, and after eight weeks of incomplete obstruction. The symptoms had been vomiting, constipation, and severe griping pain, but they had been repeatedly relieved by treatment; the bowels had acted well, and at no time, until the last few days, had there been abdominal distention. There had never been jaundice, and the patient had usually enjoyed fair health. Eight months before her death she had passed through an attack of constipation, with great pain, and

at that time a hard tumour could be felt in the right hypochondrium. At the autopsy the gall-bladder was healthy, and no conditions were found which threw any light upon the mode by which the stones had escaped. Each of the larger stones measured about four inches in circumference. There was no proof that any accretion had been received from the contents of the intestine.

It will be seen that in this case no permanent obstruction was caused, and that for months together the bowels acted well. Death was not from obstruction, but from perforation from irritation. The fact that there were several stones, and some small, probably conduced to this result.

The case is recorded, by Mr. Le Gros Clark, in the Medico-Chirurgical Society's 'Transactions.' It is republished in full, with other important illustrations of gall-stones, in the 'Pathological Atlas of the New Sydenham Society' (Fascic. VII.), a work which ought to be in the hands of all.

I am acquainted with the particulars of a case in which a lady, after a very prolonged and repeatedly almost fatal illness, voided a calculus as large as the largest of those here shown, and recovered.

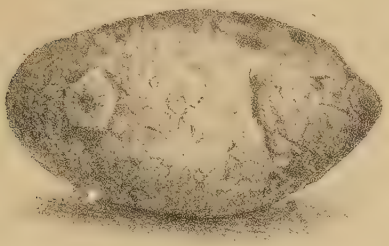


Fig. 1.

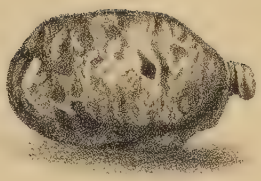


Fig. 2.

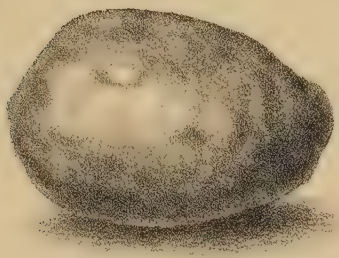


Fig. 3.

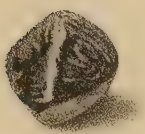


Fig. 4.

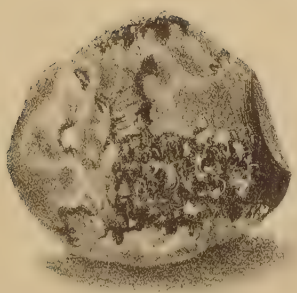


Fig. 5.

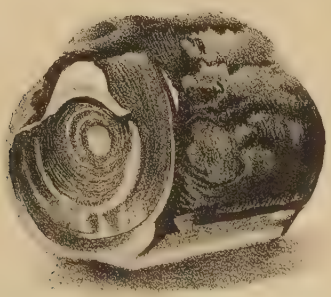


Fig. 6.

Gall Stones.

(Copied from various sources to shew form & size.)

West, Newman, lith.

corona and a considerable part of the glans showed smooth brown papules which became confluent into patches of considerable size, and persisted, in spite of all remedies from month to month, for more than a year. As in the preceding case, I cauterized them repeatedly, and we used also iodoform and mercurial ointments with great perseverance. At the present time Count N—— is quite well as regards his penis, and also his syphilitic affection of the skin; but he has recently consulted me for a general eruption on the trunk and limbs which resembles a modified form of lichen planus. It is yielding to chrysophanic acid and arsenic, and I do not think that it is in close connexion with syphilis.

I have seen many other examples of syphilitic lupoid affections of the glans penis, and have generally found the disease far more difficult of cure on that part than on the skin itself. The two which I have quoted are, however, by far the most intractable examples of the condition which I have ever met with.

No. III.—*Common Lupus affecting the Prepuce, and rendering Circumcision necessary.*

It is generally acknowledged that common lupus but rarely affects the genitals in either sex. It is, indeed, a disease which is chiefly seen on parts exposed to the influence of changes in temperature, and is rarely seen on parts which are constantly kept warm by the clothes. It might almost be said never to begin in the latter parts. I have recently performed circumcision in order to rid the patient of a prepuce which was affected by lupus, but it is almost the only case in which I ever remember to have witnessed such a condition. The case was a very remarkable one, and has already been in part recorded in my lectures on lupus.* The patient was a young boy in whom lupus developed itself as an acute inflammatory eruption in large patches over various parts of the face, limbs, and body. In the end the patches assumed unmistakable conditions of the form of lupus known as non-ulcerating, and as such the disease, at the end now of four years, still persists.

* See *British Medical Journal*.

Amongst the parts attacked were the lobule of the right ear and the prepuce. The latter was long become much enlarged by the lupus growth. I was able to remove the whole of the latter by an ordinary circumcision, and the parts healed well and have remained sound. The explanation of the affection of the genitals in this case is no doubt to be found in the extraordinary vigour of infective activity which the disease showed in the first stage, aided probably by the youth of the patient.

BALANITIS PERSTANS.

There is a very peculiar affection of the glans penis of which I have seen a few examples, but which, so far as I know, has never been described. From its chronic, indeed almost incurable, character, the name which I have suggested seems applicable. It occurs, I think, only in men past middle age. The glans shows abruptly-margined map-like areas of a deep red colour and slightly moist, but not raised nor in any degree ulcerated. They remain for years together, with no change excepting slow extension. The surfaces affected look slimy and glazed, and easily crinkle like tissue paper.

No. IV.—*An example of Balanitis Perstans.*

A gentleman aged 45, who was sent to me by Dr. Hughlings Jackson, afforded a good example of this condition. He was unmarried, and there was nothing special in the state of his health. Retraction of his prepuce disclosed almost the whole glans apparently in a state of acute superficial inflammation, red and shining as if covered with moisture or with vaseline. Yet it was scarcely moist, and no secretion could be removed, nor were the appearances materially altered by wiping. On careful inspection it was seen that the red patch included the greater part of the glans, but was everywhere abruptly margined. Its edge was more congested than the surface. However much wiped, the surface always remained bright and glistening. The corona glandis was nowhere involved in the edge of the patch coating close to it. The opposed surface of the prepuce was in a

precisely similar condition. The parts looked as if very irritable, but he declared that there was no itching whatever, and no soreness. If, however, the part were rubbed roughly, a peculiar aching was produced. He said that the condition had been present for seven years, and persisted, or rather extended, in spite of the utmost cleanliness. He always washed night and morning. It gave him no inconvenience, and were it not for the look of the thing, and that it soiled his linen, he would not care anything about it. There was a rim of congested blood-vessels around the meatus, but no soreness. He did not recollect having suffered from balanitis as a schoolboy.

The state described above was exactly like that in another gentleman of past middle age, who was sent to me by Dr. Fenwick. He was married, and of most cleanly habits. His patches in the glans were abruptly mapped out and always the same, red, glossy, and crinkly. He came to me at intervals for more than a year, but I failed to cure him.

NOTES ON SMALL-POX, VACCINATION, AND EXANTHEMS.

No. I.—*Insusceptibility to Vaccination.*

Since my former note on this subject I have received the following letter from a medical friend. The explanation which I would suggest is that he had in reality been exposed to small-pox in infancy, and had the fever without the eruption.

My dear Sir,—On reading your estimable Archives I thought I would send you particulars of my own case after reading your remarks in the January number, p. 223, on "Insusceptibility to Vaccination."

I was a public vaccinator for over thirty years, but was never vaccinated in infancy; never had small-pox. It is a fact, however, that during my office I vaccinated myself over four hundred times in every conceivable part of my body where I could get at it with lymph direct from the arm, but *unsuccessfully*. About the third or fifth day it seemed certain I was caught, but only to be disappointed, and in seven or eight days all would be dried up into a scab. I may add I have attended hundreds of small-pox cases. I was also invulnerable to the operation by friends who asked "to try their strength."

Yours faithfully,
D. J——, M.D.

No. II.—*Variola sine Variolis. The doctrine of abortive exanthems.*

Concerning the occurrence of a protective small-pox without an eruption, Boerhave writes (Aphorism 1399): "You'll often find a small-pox fever without any small-pox at all breaking out." His translator adds, "And the patient in all probability never be in danger afterwards of having them more than any other that has had 'em break out effectually." Both author and commentator agree in believing that the appearance of the eruption may now and then be prevented

by treatment, a statement which may be held to imply that they had both witnessed special examples of variola sine variolis.

No. III.—*Mortality from Chicken-pox.*

A certain number of deaths from chicken-pox are every year registered in Ireland. In 1864 there were 12, in 1870 only 2, in 1883, 13, and in 1888, 5. In answer to the suggestion that most of these were modified small-pox is the fact that the number recorded in the several years bears no proportion to the prevalence of small-pox. Thus in the year 1883, in which no fewer than 13 were registered as deaths from chicken-pox, the small-pox mortality was only 29; whilst in 1872, when the latter was 3,248, only 5 deaths from chicken-pox were registered. In 1884 chicken-pox produced almost as large a mortality as small-pox, the numbers being 4 of the latter and 3 of the former. The great variability of the number of deaths from chicken-pox in different years would suggest that severe epidemics had at times prevailed; thus it was 2 only in 1868.

No. IV.—*Rashes resembling Scarlet Fever.*

Dr. Cotman reported to the Hunterian Society in November, 1888, two cases in which adult men were the patients. In each, two attacks had occurred. The rash in one was preceded by symptoms of cold-catching, for which a "diaphoretic" was taken. In the other, severe neuralgia in the forehead preceded the eruption. The rash in each resembled scarlet fever, and was universal. In both universal desquamation followed the eruption, even the hands and feet peeling, and in one attack the nails falling. In neither case was the patient seriously ill. I had a case in which a similar history was given.

No. V.—*Vaccination during Secondary Syphilis.*

A gentleman comes to me who, during the prevalence of small-pox, was vaccinated whilst he had a secondary eruption of syphilis on him. He was taking mercury at the time.

The syphilis proved very severe, and the rash passed into rupia, and is still at the end of a year not quite well. His vaccination spots, too, both took well; they were long in healing, and have left two little dusky buttons of keloid.

No. VI.—*Keloid in Vaccination Scars.*

Mrs. T——'s infant, now eight months old, who was vaccinated five months ago, has now two little buttons of keloid, her vaccination scars. One of them is very definite, glossy and hard, the other less so. The scars are rather irregular. I am told that the vaccination went on quite well, and healed as soon as usual. She is brought to me on account of a suspicion of hereditary syphilis, and has eczema. I doubt as to the syphilis.

No. VII.—*Keloid in Vaccination Scars (another case).*

Dr. Watson, of Tufnell Park Road, has been kind enough to supply me with the following facts. I have since been favoured with an opportunity of seeing the child.

Dear Sir,—Your statement in the last volume of Archives, that nothing is less common than for vaccination scars to take on keloid induration, must be my excuse for troubling you with the following notes:—T. L. æt. 1 $\frac{1}{12}$. Vaccinated at four months with calf lymph in three places, which all took. The mother, who is careful about her children, is sure that the vaccination did not run an unusually long course, and that there was no fœtor from the sores. She is sure it was all over in a month. The child was brought to me with three distinct keloid nodules in September, 1889. They had just been noticed.

T. L. is the third child. First died of diarrhœa, æt. 4 months; second of bronchitis, æt. 18 months. Neither first nor second was vaccinated. No miscarriages. No suspicion of syphilis has ever arisen in connection with the family since I attended them, *i.e.*, at the birth of T. L.

I have no doubt I could get the mother to bring the child in to see you if the case is of sufficient interest.

I am, yours very truly,
C. S. Watson.

No. VIII.—*A case in which in a puny child good vaccination vesicles inflamed and ulcerated, and an eruption followed. Death in the sixth week.*

The particulars of the following case which occurred some years ago have been supplied to me by a medical friend. I never saw the patient.

1st week	Vaccination: patient a puny child a month old. Three others done at same time from same lymph did well.
2nd week	Vesicles looked so satisfactory that it was proposed to use them for arm to arm vaccination. This was, however, not done.
3rd week	The sores had ulcerated, and there were vesicles round their margins. Some spots appeared lower down the arm, and a few on the legs.
4th week	The eruption was not symmetrical, though it became fairly general in the limbs. Not on the body.
5th week	Notes imperfect. Vaccination sores presumably still unhealthy.
6th week	The child died apparently from exhaustion.

Comments.—The above is probably a good example of a certain class of vaccination cases which go wrong. There is not the least reason to suspect any want of care in the vaccination or defect in the lymph. Nor is it probable that the child was the subject of inherited syphilis. There was from first to last no syphilis in the case. The child was simply puny and feeble, its vesicles after full development inflamed, and the products of inflammation proved infective, and produced vesicles, &c., first in close proximity with the part, and subsequently at a greater distance. This fact of local infection with satellite sores, and the non-symmetry, separate the case from one of ordinary vaccinia exanthem. In the latter the eruption is symmetrical, and is in no way associated with inflammation of the original vesicles. Nor do such cases end fatally, for the eruption is in its nature transitory. Cases of pus-contagion or infection by the products of inflammation, such as I suppose this to be, are indefinite in their duration; their severity depending much upon the state of health of the patient.

If we ask as to the cause of the inflammation of the vesicles

in the first instance, at the stage where they ought to have dried up, several hypotheses are open to us. They may have been subjected to mechanical irritation, their crusts rubbed off prematurely, and their surfaces exposed to atmospheric contagion. This is an exceedingly probable supposition, and the general carelessness as to the protection of arms during the healing stage is probably much to be regretted. Inflammatory action of a non-specific character once set going by any cause may probably become a source of infection to other parts, and in a certain sense of blood-poisoning. Nor is there anything extraordinary in the circumstance that puny, ill-cared-for infants die occasionally under illnesses of this kind. Another suggestion may be made as to the possible cause. The sores may have been infected by some non-specific secretion at the date of the visit at the vaccinator's surgery on the eighth day, when the vesicles were punctured and "wiped dry with a clean cloth." The absence of other similar cases in the same surgeon's practice makes, however, this supposition less probable.

ON MORPHŒA, DIFFUSE SCLERODERMA, AND ALLIED DISEASES.

Our knowledge of the diseases classed as Morphœa of Scleroderma has greatly advanced of late years. The accumulation of clinical evidence respecting what twenty years ago ranked as little more than a curiosity, has been so considerable that we are now able to separate with some degree of clearness into several groups what were formerly classed as one malady. All our recent systematic works, Jamieson, Robinson, Crocker, Duhring, &c., contain well-written chapters upon them, in which the principal lines of separation are clearly marked. We now separate clearly the ivory patch localized invariably non-symmetrical morphœa from the diffuse and invariably symmetrical form. From both of these we distinguish the diffuse and general condition of œdema with hardness and coldness which is seen only in infants (Sclerema Neonatorum). There remain, however, many important questions upon which at present our knowledge is not sufficiently detailed. I have already written repeatedly, and at some length, upon this group of maladies, but as my last communication was now ten years ago,* and many facts have accumulated since, I now purpose to return to it. I shall begin by recording the notes of some cases, and in subsequent papers shall introduce general comments.

* See Atlas of New Sydenham Society and descriptive catalogue. See also "Lectures on Rare Diseases of the Skin."

CASE I.—*Diffuse Scleroderma preceded by Œdema, but exempting the hands—Face not much affected—Insomnia and remarkable loss of flesh—Great inconvenience from stiffening of legs and abdomen—Death from Erysipelas about a year from the beginning of the disease.*

Mr. H. E——, aged 53, a commercial traveller residing in L——, was brought to me by Dr. L—— of that city, in the early part of January, 1880. His first symptoms dated back one year, when he began to lose flesh and suffer from sleeplessness. He did not, however, seek advice till six months later, when he consulted Dr. L—— on account of swelling of his legs and inability to sleep. At this time his urine contained large quantities of phosphates, but no albumen. In September Mr. E—— went to Smedley's hydropathic establishment at Matlock. Here he remained two months, chiefly complaining of distressing insomnia and of the swelling of his legs. It was thought that there was some ascites. By the treatment a copious furuncular eruption was produced. He left Matlock much weaker, but almost free from œdema. Up to this time the peculiar stiffening of the skin had not attracted attention, having been, perhaps, to some extent concealed by the œdema.

When in January, 1880 (six months from the beginning of symptoms), Mr. E—— was brought to me, his condition was as follows: The skin almost universally stiff and board-like. The lower extremities were the worst, and certain parts, the scrotum and penis and the hands, were exempt, whilst the buttocks, the sides of the abdomen just above the iliac crests and the axillæ, were but slightly hardened. The hands from just above the wrists were quite free (exactly as in Mrs. B——'s case). There was no ascites, and not much œdema of legs. He was in fair health, but had lost two stones in weight during the last year (from 12½ st. to 10½ st.). His pupils acted well and his bodily functions seemed natural, with the exception that he still slept very badly. His sleeplessness was perhaps in part caused by

pain, soreness and stiffness in his legs. He said that his legs felt numb and shins sore, as if bruised. The middle parts of the face were less rigid than other regions. There were no ivory patches, but the cheeks, &c., showed tufts of dilated vessels (stigmata).

In this case no cause could be assigned. The gentleman had always lived regularly, and there had been no special exposure to cold. He thought he might have taken cold in July, but this was subsequent to the beginning of some of his symptoms. As in Mrs. B——'s case, loss of flesh steadily continuing had been a marked symptom.

I did not see this patient, excepting on the one occasion to which the above notes refer. About two months later, Feb. 22, 1880, Mr. L—— wrote to me that Mr. E—— was worse, and that he was suffering from almost total insomnia. He stated that the hide-bound condition had increased, especially about the knees and the lower part of the abdomen, "so that he cannot stand upright and has great difficulty in walking at all—getting upstairs being almost an impossibility." In May, Mr. L—— again wrote to me, "He is now in a most wretched state. The legs and thighs are flexed and abducted, and the skin of the abdomen and thighs is intensely hard, brawny, and tight. So is that of the arms. The face is not affected. His sleeplessness is still the most formidable feature. He has no rheumatic pains, but suffers along the attachments of the abdominal muscles from a dragging sensation. His bowels act well, appetite good, and mind quite clear." From this time, the poor fellow lived on for four months longer. He died of an attack of erysipelas in September, 1880. He was believed to have contracted it from sitting in a draught in his office. It spread from his legs to his trunk. In this respect the cause of death was the same as in the case of Mrs. B——, who died of erysipelas in the London Hospital. Mr. S——, of L——, was kind enough to send me details of the autopsy. Nothing was disclosed of any importance in reference to the morphœa. The kidneys were large, soft, and pale, the liver fatty and granular.

CASE II.—*Case of diffuse Morphœa or Scleroderma which was at first supposed to be caused by arsenical dust—Changes general but only slight—Hands and feet scarcely affected.*

In the case of Mrs. B——, of H——, those who first saw her were inclined to suspect that the disease might have begun in arsenical poisoning, but subsequently it became probable that this was a mistake. Mrs. B—— was a lady of about 26, who had been married four years and had borne three children. At the age of 17 she had suffered severely from bronchitis, and at a later date from dysentry. During her married life, although in good health, she steadily lost flesh. It was during May of 1879 that her first symptoms began. Her throat was sore and she had much sneezing. She went to the seaside for a week, and returned feeling quite well. During the early part of June her throat, nose, and eyes were irritable and the sneezing returned. In a little time she observed that her neck was becoming stiff, and the stiffness gradually spread to the arms, bust and face. Dr. —— was now for the first time consulted, and he at once said that the symptoms were arsenical. A month later (July) Mrs. B—— went to L—— and saw Dr. ——, who, knowing nothing of Dr. ——'s opinion, said that the condition was due to arsenic. During August, Mrs. B—— was from home at the seaside. Her skin was more stiff and slightly swollen (?) and the eyes were sore but the throat had recovered. During September an attack of diarrhœa occurred. In October Dr. —— again saw her, and again expressed the same opinion.

In the following February, eight months from the definite commencement of the stiffening of the skin, Mrs. B—— was brought to London and seen by Sir James Paget and myself. Her condition was then as follows: The skin of both upper extremities of the neck, shoulders, and face, and of the bust as low as the epigastrium, was stiff, rigid and board-like. It could not be pinched up. On the forearms this condition ceased just above the wrists, and the hands were quite free.

She complained, however, that her fingers were stiff and that she could not play the piano. No definite ivory patches could be distinguished, but there were many ill-defined streaks which much resembled a tallow candle in colour, and between these were streaks of erythema. Thus a mottled sort of marbling was produced. The white pallor of the streaks of the arms became much more apparent when the skin was stretched by extending the elbow. On the face the condition was less pronounced than on the arms and neck, and in the middle of chin and nose it could scarcely be appreciated. The cheeks showed little tufts of dilated vessels, but not so conspicuously as in some cases. Mrs. B—— said that her arms had formerly been much stiffer than at present, and that for a time she had been quite unable to put them behind her. I was told that the condition had varied considerably at different times, being sometimes better for a week or more and then worse. The skin always seemed more stiff after sleep, and became more supple during the day.

As to arsenic, it was at first believed that Mrs. B—— had been working with a Berlin wool which contained arsenic. The results of subsequent analyses, however, seemed to negative this suggestion, as not a trace of arsenic could be found in the wool. Nor was there any material quantity in any of the wall papers of her house.

Her feet and legs were but little affected. She said that she had been for ten months or more liable occasionally to red rings or wheals, which would increase in size for a time and then disappear, sometimes becoming as large as the palm of the hand. They come chiefly in the arms and chest. Her friends had told her that her eyes looked smaller, probably owing to contraction of the eyelids. Her pupils were active. Along the outer side of front of each elbow was a whitish tawny streak with brown edges. These streaks became more evident when the skin was stretched. She felt well, had good appetite, and slept well.

I saw Mrs. B—— again on Oct. 29, 1880. Her condition was much as before. The changes in the skin of the face did not attract attention until searched for, but were easily

recognized by the finger. She stated that she had been much better for a time, when suddenly, with change of weather, the skin became hard and tight again. She had recently been much less liable than formerly to catch cold, but exposure to cold always made her skin stiff. On Sept. 24, 1881, Mrs. B—— again came to London, when the following notes were made. She had an eruption of erythematous blotches last January, lasting two or three months. She has taken arsenic regularly for eighteen months, omitting three in the summer. It has agreed well on the whole. Her face is still stiff and marbled, especially over the malar bones. Is worse in damp weather, but not in cold or hot. Finger-ends not affected. The backs and palms a little stiff. She is not using any local application.

I have heard subsequently that Mrs. B—— has almost wholly recovered.

CASE III.—*Diffuse Morphœa, preceded by conditions resembling those of Raynaud's Disease—Death from acute catarrhal pneumonia.*

Dr. Hesse brought to me in November, 1885, a very interesting example of this combination. The patient was a German gentleman, who had long been residing in Yorkshire. He was of fair complexion, and had always enjoyed good health. He had been accustomed to use cold water very freely, both summer and winter, and had never experienced much inconvenience in doing so until a year ago. In the autumn of 1884, although the weather was not particularly cold, his wife used to notice that his fingers were always cold and dead when he came down to breakfast after his bath. She remonstrated with him about continuing it, but he asserted that it did not chill him, and that he was the better for it. His fingers, however, continued to "die," and after a time got stiff and hard. After a time some of the nails inflamed and became sore. A month or two later his wife discovered, what he had not noticed himself, that the skin of his entire body was becoming hard like leather. These changes had been in progress rather more than a year when

I saw him. His fingers were then slightly swollen, and almost as hard as wood; they were mottled and tallowy, and their nails showed transverse ridges, and had become more convex than natural. His face was smooth and hard; it was quite impossible to pinch up any part of his skin on the cheeks or forehead, and he could not either frown or smile.

The skin of his trunk and of all his limbs was involved in a similar condition, but in varying degrees in different parts. Thus on the chest and front of the neck it was very stiff, but on the back of the neck and on the shoulders it could be pinched. He said that he experienced no inconvenience from it, excepting on movements. He could not stoop easily, on account of the stiffness of the skin of his knees. His age was 49, but the entire absence of wrinkles on his forehead and face made him look much younger than he was. His fingers were so stiff that he could scarcely use them to dress himself.

The subject of the above notes resided at Bradford when he was a patient of the late Dr. Bronner, through whose kindness I was kept informed as to the further progress of the ailment. The use of glycerine was of some benefit in alleviating the stiffness of the skin, but did not effect much, and Mr. H——, in spite of internal treatment, lost flesh and strength. On December 2nd he went out in a bath-chair, and although very warmly wrapped up he took cold. An attack of pleuro-pneumonia followed. I give the details of his last illness in Dr. Bronner's own words. It appears to have been a typical case of catarrhal pneumonia, and the entire unconsciousness of danger on the part of the patient, the absence of pain, and the sudden termination, are features which I have observed in several similar illnesses. Probably the pneumonia had nothing whatever to do with the scleroderma.

"On the 2nd of December he drove out as usual in a bath-chair, very warmly wrapped up. The weather was very cold and windy, and he seems to have caught cold then. I saw him only the following noon, apparently in his usual state, only complaining of a slight pain in his left side. He had waited for me to call before he got up, having no idea of being seriously ill. I found considerable dulness of posterior

part of thorax (both sides) up to the scapular regions, with extensive friction sounds all over posterior part of thorax, bronchial respiration, slight crepitation, a few rusty sputa, extremities cool, no dyspnœa whatever, and temperature 98°. He got so rapidly worse that in the evening the dulness had occupied the whole posterior part of thorax, whilst the anterior half was tympanitic all over. Temperature same, 98°, extremities cold. At 10 p.m. paracentesis of the chest was tried (pulse very small and about 120), but only about a teaspoonful of clear serum escaped. He died the following noon, having been in a moribund state all night and morning, without much dyspnœa, free from all pain, so that he stated in the morning 'he was much better, thank God, and free from pain.' He remained conscious almost to the last, and had no idea that he was going to die.

"I was extremely sorry that I could not ascertain the state of viscera after death.

"P.S. I may quite as well state that, alarmed by the rapid progress of the disease, I called our physician, Dr. Major, in consultation ten hours after my first visit, when the patient was already moribund (cold extremities, threadlike pulse, but *not* livid, and no anxious breathing), the thorax was tapped with a trocar in two different places, but only very little clear serum escaped."

CASE IV.—*Diffuse Morphœa of extremities, face, and bust, with close alliance with Raynaud's Disease.*

I saw Miss F——, aged 23, residing at B——, on July 8, 1887, with Dr. M——.

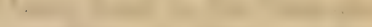
Her hands were livid, changing frequently from almost black to a white lardaceous appearance. Her face was a little swollen and red, and covered with almost confluent stigmata. She had had small abscesses at the tips of many fingers. Her feet and toes were affected in a similar manner to her hands, but much less severely. The skin of her face and bust was affected, and was everywhere more or less rigid. Her lips were especially thin and board-like. On the forearms

PLATE XVII.

LATE STAGE OF SCLERODERMIA OR DIFFUSE MORPHŒA.

The hands shown in this Plate offer a good example of the atrophic condition of diffuse morphœa or sclerodermia. The fingers have lost all plumpness, and become slender, pale, and wooden. The greater part of the hand is of wax-like pallor, but there are numerous patches of congestion (stigmata), like red seaweed, and here and there are a few little ulcers. It was quite impossible to pinch the skin up anywhere, as it was tight and parchment-like. Although there had been no gangrene of appreciable extent, the nails and tips of the fingers had suffered more or less. It is worth while to look carefully at the portrait, and note how symmetrical the changes are, and also to compare them with those shown in the next Plate, numbered Plate XXXI. It will be seen that in both hands the thumb has almost escaped (probably on account of its shortness); that the index and middle finger have suffered more than the ring; and that the little finger has had its terminal phalanx twisted and flexed. Similar statements are true of Miss F——'s hand, shown in Plate XXXI. With some minor differences, the same may be said of Plate XXX.

PLATE XVII.



...ers have lost all plumpness, and become slender, pale, and ...

... there are numerous patches of congestion (stigmata), like red sea-weeds, and ... a few little ulcers. It was quite impossible to ... parchment-like. Although there had been no ... cible extent, the nails and tips of the fingers had suffered more or less. It is worth while to look carefully at the portrait, and note how symmetrical the changes are, and also to compare them ...

... will be seen that in both hands the thumb has almost escaped ...

... ments are true of Miss F——'s hand, shown in Plate XXXI.

the state of hardness ended gradually a little above the wrists, or rather it diminished, so that it was not easily appreciated. The mammæ were fairly full, but the skin over them was decidedly tight. Her eyelids were not affected. She stated that in cold weather she became "stiff as a board in all her limbs," whilst hot weather made her "flushed and mottled as if she had an attack of measles." She was thin but rather florid, and of brown complexion. No remarkable tendency to chilblains had been observed. The history was that the condition had begun with slight swelling of the feet and arms. She felt at the time weak and poorly, but had no definite illness. I regret that I have not preserved sufficiently detailed statements as to the early stages. The case which is to follow is more conclusive on this point.

Additional Notes, 1889.

Miss F—— was sent to me again in 1889, about three years after the preceding notes were written out. Her hands were then in a deplorable condition. The end of the right forefinger was gangrenous, and in the pulps of several others there were deeply placed purulent bullæ. The severity with which the digits suffered seemed to be greatest at the thumbs, and to diminish onwards to the little fingers. Consequent on the destruction of the pulps of the fingers by "festers," a curious condition of loss of length in the nails had resulted. Thus the thumb-nails, although of normal breadth, were not more than a quarter of an inch in length. The nails of the little fingers had scarcely suffered, but all the others had in some degree.

I could not obtain any additional facts as to the early stages. Miss F—— thought that the condition had come on gradually, and that it had been increased, if not originated, by great grief at the death of her mother six years ago. A friend who was with her felt sure that it had begun after catching cold from exposure on a very snowy day, but of this Miss F—— herself had no very distinct impression.

Additional Notes, 1890.

I saw Miss F—— again in May of the present year, when she came on account of gangrene of the right forefinger. Thus we have an instance of what may be called delayed symmetry, for on the former occasion it was the end of her left forefinger which passed into gangrene. On the present occasion, as on the former one, the ring-finger is also affected. The sloughing process has been attended by intense pain, and there is now present a good deal of congestion and inflammatory œdema. The whole back of the hand is swollen. The skin of her hands is not particularly board-like, nor, as previously noted, are her fingers wooden. The skin of her forearms can still be pinched up. Thus it might be suggested that the conditions are rather those of Raynaud's disease than of sclerodermia. Her face, however, presents an appearance which any one experienced in the latter would at once recognize, its skin being tight, somewhat glossy, and covered with stigmata. She thinks, however, that her face is not so stiff as it formerly was. The palms of her hands are quite natural and plump. Miss F—— cannot explain her present relapse. She got well through the early part of the winter. It was in the beginning of March that her fingers passed into gangrene. She had been taking great care of herself, and had not been exposed to cold. She tells me that years ago her hands use to turn blue or even black; but that they do not do so now nearly so much as formerly. Her feet are often very cold, but no special changes have ever been noticed in the toes.

It is clear that we have in this case an example of symmetrical gangrene of the extremities, which fits well with the original description of that malady given by Raynaud. At the same time there are changes characteristic of diffuse sclerodermia. The case affords a good example of the alliance of the two maladies.

CASE V.—*Diffuse Sclerodermia of the face and extremities. Close alliance with Raynaud's Disease.*

Dr. Hughlings Jackson was kind enough to send me the subject of the following narrative.

Mrs. S——, aged 41, the mother of five children, had enjoyed good health until about three years before I saw her. She had, however, always been somewhat nervous, and never thought herself very strong. She had ten years ago suffered from small-pox. Her youngest child was about two years and a half old. She had never suffered much from chilblains. Her malady commenced according to her observation by the liability of her hands to "go purple." "If I lifted them up to comb my hair all the blood would go out of them, and they looked as if they were dead." After this liability had existed for two years "they began to swell a little and became set." The liability to become stiff came on very gradually, but Mrs. S—— expressed herself as certain that it was not present at first, and that it had only become confirmed during the year preceding her visit to me. Thus it seemed certain that Raynaud's symptoms had preceded those of sclerodermia. When I saw her she was accustomed to suffer much pain from the cold. Her legs and feet were slightly œdematous, but the skin was not hard. Her toes were apt to die, and one of them was during the visit as white as a candle. Her face and upper extremities were hardened, the fingers being as stiff as wood. The hardness of skin was limited to exposed parts. It shaded off gradually on the neck, and was scarcely perceptible over the clavicles. Mrs. S—— reported that the upper arms, trunk, hips, and thighs were not at all affected.

We have here a very definite proof of the association of Raynaud's disease with sclerodermia. There could be no doubt that it had preceded and in some sense caused it. The sclerodermia had not spread to any perceptible degree to the parts which were protected by the dress. That the case in its latter stage had really become one of sclerodermia was proved by the implication of the whole face and by the wooden condition of the fingers. These states are not ordinary concomitants of Raynaud's disease, however protracted.

CASE VI.—*Feeling of "tightness" in the skin in a female aged eighteen—Want of pliability with a sense of resistance to the touch demonstrable in almost all parts except the scalp, ears, nipples, loins, flexures and prominences of the joints, and on the hands and feet—Changes noticed about one year. Supposed to have developed in about three months, and to have scarcely altered since.*

Helena Harper, æt 18, a nursemaid (residing at 343, Gray's Inn Road, N.*).

December 12, 1879.—She says that her attention was first called to her skin by a sense of "tightness," chiefly in the arms. This was at the end of November of last year. She soon afterwards noticed white spots come out on the skin of the extremities, &c. These white spots were followed by red ones, such as can be seen now. The spots were very small, but made the skin feel rough.

The sense of tightness spread over the face, neck, chest, back, abdomen, upper and lower extremities, in the course of the next three months. The lower extremities, however, were much less affected than the rest.

She thinks that the state of the skin has not altered much during the last nine months. The skin has been very irritable, and this has led her to scratch much.

She does not perspire freely; she thinks scarcely at all.

She suffers much from cold hands and feet; has always done so, and has chilblains every winter.

She has not menstruated regularly for the last two years; about once in three months only. When this affection of the skin began she was merely helping in domestic work at home. Just before she noticed her skin becoming tight, she had been laid up in bed with a cold and cough. She does not appear to have had any rheumatic symptoms.

She complains that the tightness of the abdomen and chest

* I give the name and address of this patient, as in some other cases, in the hope that some of my medical friends may possibly be able to supply me with notes as to her present state.

affects her breathing. The neck is so stiff that she cannot turn her head from side to side properly. When she tries to do so, it seems to drag on her face and eyes.

To the eye there seems exceedingly little the matter with the skin except on the cheeks, where there is a rosy appearance combined with a shining, tense aspect and the smoothness of a wax model.

To the touch (with a few exceptions to be noted presently) the skin everywhere feels firm and resisting, and cannot be pinched up into a fold. The latter symptom varies in degree to some extent in the parts affected, but everywhere forms the most demonstrable condition.

The parts which are unaffected seem to be the hairy scalp, the ears, the middle line of the face (root of nose, upper lip, &c.), the nipples, the loins, and the portions of skin over prominent points of bones and in the bends of joints, and the hands and feet. The mucous membranes do not seem anywhere affected. I do not think that the middle line of face or the ears or even the nipples absolutely escape. It is only a question of lesser degree.

The forehead, cheeks, chin, sides of the neck, scapular and clavicular regions, and the upper and lower extremities, are the parts most concerned. The eyelids, mammæ, and abdomen seem but slightly so, and the lower extremities less than the upper. The mammary regions are very decidedly affected. On the sides of the neck the integument feels almost board-like. The skin and subcutaneous fat of the forearms feel almost as stiff as in a rigid corpse.

The skin seems too short on the extremities, being put on the stretch too much on movement; so, also, on the neck and face. The change does not seem to go deeper than the subcutaneous tissue. There is no gluing to the bones, &c. The skin can be made to glide over the deeper parts. It is simply impossible to wrinkle it, or pinch it up into a fold. There is no desquamation of the epidermis. When on the stretch, the skin is, of course, pale. There does not seem to be any thickening of the skin; no deposit or growth in it, or in the subcutaneous tissue. The change shades off gradually into healthy conditions at the bends of the elbows, wrists, &c.

The cheeks do not appear to be thickened when grasped between the thumb and finger. There is no pitting on pressure anywhere.

On the extremities, upper part of chest, &c., there a few spots here and there showing abrasion of the epidermis or a covering of blood-crust, as if from scratching.

The above notes were kindly supplied to me by my friend, Mr. Waren Tay, when he sent the patient to me. The following are my own additions :—

December 20, 1879.—I do not discover the ivory patch anywhere. The nearest approach to it is on the sides of the neck, when on tension of the skin a sort of streaky marbling is produced by the white pallor between the rows of hair follicles.

I think that the platysma is tight, and that it is partly owing to it that she feels difficulty in turning the neck.

The exemption of the hands and feet is very definite and peculiar. I am not sure that the hands absolutely escape. The fingers have a slight degree of the feeling as if made of wood, but it is only little. They are of dull red with congestion, and the vessels fill slowly after emptying.

She complains much of cold, especially in her back. The legs are affected in slight degree; the feet not at all.

On all parts, but especially on neck and face, there are ill-defined scratched papules, a sort of abortive acne. She had been liable to spots on her face in summer for some years (Penmann's prurigo).

The state of the face closely resembles that of Mrs. Moore (narrated at length in my published lectures), and I have no doubt that it is the same condition differing chiefly in that the stage is less advanced.

I have no further particulars respecting this patient. No doubt she has been subsequently under the care of other observers; and should her case be recognized by any, it will be of much interest to put the sequel on record. It will be seen that eleven years have passed since the date of the last note.

No. VII.—*A case in which, during a long series of years, the conditions of diffuse Sclerodermia of the upper extremities and face had become developed—Alliance with Raynaud's disease.*

In May, 1881, my friend Dr. Stowers was kind enough to send for my examination the patient to whom the following notes refer.

She was a married woman, aged 49, and had suffered more or less since the age of 25. Her case has been reported briefly by Dr. Stowers in the Transactions of the London Meeting of the International Medical Congress (1881). She died, as Dr. Stowers informs me, of bronchitis in 1886. It would appear to be an example of the very insidious and slow progress of sclerodermic changes. In the early stages the disease was so indefinite that no diagnosis could be given.

When I saw Mrs. H——, her fingers were rigid and the skin of the hand and wrists stiff and hard. Her forearms also were stiff as regards pronation and supination, especially the right, which was the one first affected. The tips of her fingers had for long been accustomed to fester in cold weather, and also when it was very hot. She said that this liability began in her right hand as early as the age of twenty-four. The skin of her toes and feet was not rigid. The skin of her face looked tight and rigid, and showed many stigmata. She was aware of the presence of the latter and of some stiffness, but would scarcely admit that otherwise her face was affected. It was, however, as stiff as leather, and she could not wrinkle her brow in the least. That it had long been so was proved by her statement that ten years ago a dentist had remarked on the fact that she could not open her mouth on account of the rigidity of the lips. He said that he had never met with lips so stiff as hers. She believed that at the same date some florid spots were present on the cheeks. Even at much more distant dates, dentists had repeatedly commented on her stiff mouth. Mrs. H—— had suffered from eczema in one leg, and had passed through several attacks of an

erysipelatous kind, affecting on one occasion the leg, and on others the face.

I diagnosed the case as one of diffuse sclerodermia of the face and upper extremities. Its history would suggest that probably in the early stages conditions allied to Raynaud's phenomena had been experienced in the hands, and that they had passed very gradually into those of sclerosis.

PLATE XXXI.

SYMMETRICAL GANGRENE OF EXTREMITIES WITH SCLERODERMIA.

Shows the condition of gangrene in the hand of Miss F——. It will be seen that the end of the left index finger is in a condition of gangrene. The finger is not mummified, but moist, and that the proximal portion is distinctly swollen. On a subsequent occasion, a year or two later, the other finger passed into a precisely similar condition. There was on this occasion decided inflammation of the hand, and bullæ formed on the adjacent parts. After the gangrenous part separated, the ulcer healed well. Attention is specially asked to the fact that in this case the fingers had not become slender and wooden, but retained a moderate degree of plumpness.

The case partook as much of the nature of Raynaud's disease as of sclerodermia, but it is to be remembered that the patient's face was in the condition of the latter malady. There can be no doubt that the two are often combined.

PLATE XXX.

This Plate and the following one illustrate the conditions shown in the hands in [illegible] of sclerodermia or diffuse morphœa. It will be seen that the hands are pale and very thin, and the fingers slender. There are also many hide scars about the fingers, and a few ulcerations. The extremities of most of the digits have been damaged by [illegible] under the nail and in the pulp. These changes are [illegible] and very like those shown in the next Plate. As a point of interesting detail, it may be noted that the little finger has its [illegible] in these three Plates (XVII., XXX., XXXI.).

ON HEREDITY IN REFERENCE TO DISEASE.

(*Continued from page* 306, *Vol. I.*)

The attempt to determine in the human race the shares taken respectively by the male and female parent is beset with difficulty. A child may inherit the colour of eyes and hair from one parent and its mental habits from the other; but before we are entitled to assume that such apparent facts mean anything, we must ascertain the peculiarities in those respects not only of the parents but of their ancestors, for it may be that we have before us simply an example of atavism. The qualities in which human beings differ one from another are also so inextricably mixed up, are so little capable of accurate estimation, and shade into each other by such slight gradations, that it is exceedingly difficult to feel confidence either in our own impressions or those of our friends. A child may be reported by one observer as the image of its father, whilst another may see no likeness whatever. It is true that these difficulties are less when the cross is between individuals of different races, such, for instance, as the negro and the European. The free use of photography in the present day in the preservation of family portraits may in the future give us valuable help in reference to some of these questions. So also the observation and careful record of such marked peculiarities as myopia and hypermetropia, which are very definitely hereditary. We have, I think, as yet no facts as to whether they are transmitted more usually by direct or by diagonal inheritance.*

* Darwin states that his father communicated to him several striking instances in which, the father having long been dead, the son so strikingly resembled him in all features that it seemed as if his old friend had risen from his grave. He further relates, from his own experience, an instance of the descent of a peculiar habit from father to daughter. A boy had the habit when pleased of moving all his fingers rapidly, and when excited of raising both hands, the fingers still moving, to the sides of his face. When an old man, he could hardly resist this habit. Of eight children one only, a daughter, inherited this habit. She displayed it at the age of four and a half.

If we have recourse to the lower animals, and to the experience of breeders, we shall find, I believe, the same results. Whenever animals of dissimilar varieties or of different species are crossed, the result is invariably a mixture in the offspring of the qualities of the two parents. Prepotency may sometimes be exerted strongly, but never to the extent of producing a pure representative of the favoured parent. Nor is it possible, so far as I am aware, to assert anything as to the special qualities which are likely to be transmitted by either sex. Many breeders will give opinions very positively on this matter, but so far as I have gone they are always falsified by inquiry. It is not true that the father gives the nervous system and the mother assimilative organs, nor the reverse. The mixture appears to affect all parts of the organization, and although the degree of modification may vary much in different instances, yet it is never absent. Even in the cases where, as regards outward form, the resemblance to one or other parent may appear very close, some discrepancy will be detected, or perhaps the temper and mental character may wholly differ. Good opportunities for observing this often occur in those animals which produce several young at a birth. In rabbits and dogs, for instance, on crossing individuals of different varieties it is often observed that some of the litter may definitely resemble one parent, and others the other, but never, I believe, is this resemblance absolute. Nor, so far as I know, can the supposed law of diagonal transmission find any support from what is here witnessed. We do not find that the male offspring resemble their mother and the females their father. I am prepared to admit on other grounds that there is reason to believe that the male parent usually predominates slightly over the female in transmission to offspring. I deny that this law obtains any strong confirmation from the cross-breeding of the horse and ass. One other fact I may conveniently here advert to which does receive definite illustration, and that is that the size of the offspring is clearly more easily influenced by the female than the male. The mule is always, at any rate in England, a far larger animal than the mute. This is exactly what we should

expect if we remember that the fœtus is dependent for its nutrition upon its mother, and that the capacious pelvis and large blood supply of a mare, as contrasted with a she-ass, would be likely to conduce to its larger growth. The same influences will also tell after birth. No doubt size in the father has its influence on the size of the child, but not in the direct and, so to speak, double way in which the mother can influence it.

On One-Generation or Single-Family Prevalence.

Dr. Joseph Adams has insisted upon the important distinction between a *family* and an *hereditary* peculiarity, on the basis that the one is confined to a single generation, that is to brothers and sisters, and the second traceable through several generations. It is important that we should keep in mind this suggested distinction, for there are unquestionably some maladies which are prone to affect many individuals in one family, and others which rarely show themselves in many brothers and sisters, but are remarkable for their persistence in the race, as proved by their repeated, though possibly very sparing, reproduction in successive generations. So strong was the impression which Dr. Adams had received from this fact of single-family prevalence, that he held that what he called family diseases were rarely hereditary. In this strong statement I cannot but think that he almost wholly ignores atavism and prepotency. Reasoning in the same direction, he held that *congenital* diseases (those usually prevailing in families) were seldom hereditary. At another place, after admitting that congenital superfluities are sometimes inherited, this author writes that he believes such instances are rare, and adds, "Still, they ought to be distinguished from congenital *diseases or privations, which always cease with those in whom they first appear.*" Again, he emphasizes this belief, and remarks, "By confounding hereditary with family diseases, we excite an unnecessary apprehension in the rising generation," and apparently he would have been quite willing to sanction the marriage of deaf mutes. He quotes Haller as remarking, "with much propriety," "Cæci certe fere bene videntes pueros generant." This curious fact did not escape the notice of Sir

Henry Holland, who goes so far as to suggest that a disease not previously known in the stock may thus manifest a remarkable degree of what we may conveniently call *single family prevalence*. The instances which he gives, although of much value, are not of the kinds of disease most easily assignable to some one definite peculiarity. Thus in one family in which "neither father nor mother had been similarly affected, three sons and a daughter underwent an attack of hemiplegia before the age of forty-five." We are not told the cause of the hemiplegia, nor is there any statement as to possible atavism. In another instance three brothers suffered from hemiplegia at about the same period of life, there being no record of any similar event in the family. In a third, three sisters died with cerebral symptoms and fits at about the age of twenty-four; and in a fourth four children died in infancy with like conditions, there being in neither any known inheritance. Sir Henry thinks that these occurrences are chiefly to be noted in connexion with disorders of the nervous system, but he adduces also examples of it in the instances of diabetes mellitus in children, and organic disease of the heart.

I shall hereafter mention some facts as to ichthyosis and other maladies which remarkably illustrate this one-family prevalence. My belief is, however, that it is very seldom that this kind of prevalence is an absolutely new fact in the family. More usually it is intensification rather than origination with which we have to deal. This I have found (contrary to a previously existing impression in my own mind in conformity with Holland's opinion) to be remarkably the case in respect to ichthyosis. I am scarcely able to mention a single instance of one-generation prevalence in which there was not known inheritance, and when we recollect the facts as regards atavism, and the difficulties in procuring trustworthy histories, we shall not place too great reliance upon the absence of the latter.

Some of the best examples of one-generation prevalence occur in connexion with deaf-mutism, and to these, too, Holland gave special attention. He mentions the very striking fact

that at the school for the deaf and dumb in Manchester there were in 1837 a group of forty-eight children belonging to seventeen families. These families counted altogether 106 children, and thus there had been an average of nearly three deaf mutes in each family. Out of the seventeen there was but one instance in which the defect was known to have existed in either parent. We may indeed admit at once that it is not likely that we shall often find evidence of direct inheritance in the instance of deaf-mutism, since the subjects of this condition rarely marry.

Whether, however, we view it as the intensification of a tendency which has existed for long, and to which some pointings have usually been manifest in former generations, or as the actual origination of a new peculiarity, the facts remain very conspicuous, and, to some extent, difficult of explanation.* I will ask the reader, in the many examples of single-family prevalence which I shall have to examine, to note carefully whether there is any example in which the defect was really proved to be new, and whether the known possibilities as regards prepotency of one parent and atavic descent are not sufficient to fairly well explain almost all that we meet with.

I shall now pass to the citation of facts as regards a variety of malformations which are believed to be hereditary. Those which I select for discussion must be considered rather as illustrative types of certain classes, for it would be impossible to attempt anything like an exhaustive enumeration.

On Inheritance in respect to Hare-lip.

I do not know of many cases on record in which these failures of development by suppression (as of digits) have been observed to be prevalent in many members of one single family without inheritance from former generations.

With hare-lip and coloboma of the iris, both of them the

* Holland writes, "The extent and sudden development of disease in these instances may in itself be taken as the proof of new elements being introduced." He adds, "All physiology is at fault as to the solution of th phenomenon."

results of defective union of parts which ought to join completely during fœtal life, the facts are different. It may easily be the case, however, that they appear to be different only because these defects are of common occurrence and the suppression of digits very rare. For it must be admitted that the one-family prevalence of hare-lip is very seldom seen, nor indeed do we frequently encounter facts which favour the belief that this defect is a matter of inherited tendency. The same is, I believe, true, but with less emphasis, of coloboma iridis and of defects in the junction of the genito-urinary organs, epispadias, hypospadias, &c. What I have to say about the heredity of hare-lip may probably be found to apply equally to these. A very large majority of the cases which we see are sporadic, and occur unassociated with any family history tending to throw light on the cause of their production. It is not usual to find them associated with other defects. Yet I have often heard of hare-lip occurring in several members of one family, and I have under my own observation a family in which a mother has borne twenty children, and nearly half of them have shown hare-lip. The extent of the deformity varies in different children. In other respects they are well developed.

On Heredity in reference to Club-foot.

Concerning the heredity of neuro-muscular malformations, such as those producing the ordinary forms of club-foot, I have little to say from my own knowledge. My experience would have led me to think that only seldom is there any family history of tendency to them, and that still more rarely is there observed any one-family prevalence.

I believe that such would also be the experience of most of those who have not made deformities of the feet a subject of special study. The observant among those who have done so, however, tell us a somewhat different story. They say that the congenital form of club-foot, "talipes varus," and its varieties, is almost always found to be more or less a matter of inheritance. Dr. Little, to whom I am specially indebted for information on this point, informs me that he has operated upon a grandfather, father, and son—three generations in

direct male descent—for the same form of congenital varus; and he adds that he seldom sees an example of varus without finding that there is some history of the previous occurrence of the same deformity in the family of the patient. It is of great interest to know further that Dr. Little's experience has led him to the belief that, amongst the near relatives of those who have marked club-foot, there often occur minor forms of awkward formation of the extremity; and yet further, that occasionally, when only one foot is affected, that some peculiarities may be noticed in the muscular supply of the hand of the same side, or of the eye. We must, I suppose, believe with Dr. Little and others that, in the production of congenital talipes varus it is the muscles which are at fault, and that the deformity results from the want of due balance between the two sets of muscles during intra-uterine life. Whether this is due to the nervous system, or is primarily a matter of muscle-development, it is not possible at present to decide; but there is no doubt, as indeed Dr. Little has pointed out, that irregular action of muscles commencing long after birth may produce deformities which are precisely similar. Muscular deformities of the hand, of a nature analagous to talipes varus, are, as is well known, exceedingly rare. We have, however, in connection with the eye some very interesting facts in proof that defects in the development of its muscles, apparently quite unassociated with disease of the nervous system, may occur and may run in families. In the case of the foot it is almost always the gastrocnemius muscle which is mainly at fault, and in the eye, in a very large majority indeed, it is the levator palpebræ. Here, however, the analogy ends, for, whilst the gastrocnemius is usually well developed and too short, the levator of the lid is always too weak, and may occasionally be wholly wanting. I do not know that I could cite a more striking proof of the possibility of one single muscle being weakly developed than occurs in the instance of congenital ptosis. This condition is not infrequent, and we meet with it in the most various degrees of severity. Sometimes the lid hangs so low as almost to cover the eye, and the muscle appears to be absolutely wanting, and between this and the slightest perceptible degree of drooping

we have all degrees. Now and then, I believe, it is left to states of debility and want of tone in adult life to reveal for the first time the existence of this congenital effect. A slight form of symmetrical ptosis, which might be considered functional rather than organic, is met with not unfrequently in adults out of tone, and especially in ladies. I have seen it once in one eye only in a lady whose daughter was unquestionably the subject of slight congenital ptosis.

I have operated on a good many cases of congenital ptosis, and have sometimes had the history given of its being an inherited peculiarity. But I do not recollect ever to have seen it in many members of a single family. The same statement is, I believe, true of club-foot; although inherited, it is but little prone to show itself in more than one individual of a family. That congenital effects of the external muscles of the eye may, however, now and then prevail in families, we have interesting proof from a case of Dr. Heuck of Heidelberg. In this case a mother, herself the subject of complete congenital ptosis of both eyes, had four children. The eldest was born without any defect, but the three others, two boys and a girl, had congenital ptosis in degree almost as great as their mother. In both mother and children there was in this instance, in addition to the ptosis, great defect in the movement of the eyeballs, some of the muscles appearing to be almost paralysed, and others shortened. This case is of the more value because a post-mortem was obtained in one of the patients, and complete absence of one levator palpebrae, extreme thinning of another, was proved; this existed in conjunction with irregularities of insertion of most of the other muscles. The patients had no other defects, and the ocular nerves were normal.

Inheritance as illustrated in Coloboma.

Coloboma of the iris is often hereditary, and not unfrequently prevails in many members of the same family. When it does so, I think it is usually in its most simple form; at least this has been my own experience. I have several times known half the children of a large family affected by it, always with the history of inheritance, and

always with remarkable sameness in the different eyes, so far as the position of the cleft was concerned, and the absence of any more serious complication. The size of the cleft varied much, and in some of the children, instead of an actual cleft, there was present a wedge-shaped portion of iris which wanted colour, and looked exactly like a scar resulting from a closed cleft. In this feature congenital cleft of the iris is again a parallel with hare-lip. In the latter also we now and then see scars, as if a successful operation had been performed, but which were present at birth. I have myself seen this more than once, and Sir William Wilde mentions its occurrence both in hare-lip and coloboma iridis.

On the Inheritance of Supernumerary Digits.

There are certain congenital peculiarities of a nature wholly different from the defects and arrests of development which we have been considering, and which are far more prone than they to become matters of family inheritance. I allude to the production of superfluous structures, of which we find the best and most conspicuous examples in supernumerary digits. These cases are common, both in the lower animals and in man. The thumb, or the little finger, or the corresponding toes, are the digits to which usually the supernumerary is attached. The condition may affect a single digit; it may be symmetrical in the hands but not occur in the feet, or it may be found in both hands and both feet. It is attended occasionally by webbing of the digits, and in a variety of it there is an evident tendency to bifurcation at the end producing a more or less double nail and a large flattened thumb, but no positive supernumerary. The frequent coexistence of this partial bifurcation with supernumerary digits favours the belief that they are produced by similar methods. The mode of attachment of the supernumerary may vary much; sometimes it is united by bone to the metacarpal bone; sometimes it shares a joint, and at others it is suspended only by a very narrow pedicle. Of this latter condition I possess two illustrations, one taken from a patient of my own, the other copied. They both illustrate well the

almost absurd effect which the symmetry of these minor excesses of growth may produce.

I scarcely remember ever to have seen an instance of supernumerary digits in which there was not a history of inheritance. Usually it occurs to one or two in a family, irregularly, exempting the large majority, but transmitted through as many generations as are known about. Sometimes, however, single-family prevalence is very strikingly illustrated. I know a family in which it had been so troublesome, that, finally affecting six sisters together, they made a mutual resolution to prevent its further transmission by refusing to marry, and I believe kept it. Every writer on the inheritance mentions supernumerary digits, and assumes that the fact of their transmission is well acknowledged. They are of especial interest for us as affording a good opportunity for examining some of the laws on inheritance, for the malformation is conspicuous, and is rarely concealed in the family. They are of yet further interest because in them Mr. Darwin has found one of his boldest illustrations of what it may be possible for atavism to accomplish.

As regards the knowledge of the usual directions of transmission as illustrated by supernumerary digits, I believe it will be found that the facts are much what I have already hinted. Neither sex possesses in virtue of sex any degree of immunity or proclivity, and we find them occurring under the most varied conditions. A father may transmit them to son or daughter, and a mother to daughter or to son; the transmission may be continuous, or one or two generations may be overleaped. There appears to be no limit, and what we observe is a general slight tendency to transmission, augmented now and then, in all probability, by the unusual prepotency of an individual parent.

Dr. W. B. Sterling, of Nottingham Place, was kind enough some years ago to bring under my observation a very remarkable case of hereditary tendency to malformation of fingers. The history is valuable as showing that—which indeed many others do—the liability is not so much to any one special malformation as to miscellaneous derange-

ments of the normal conditions. We meet with webbed fingers, superfluous fingers, and double nails, in the same patient, or in different members of the same family. The boy who was brought to me was two months old. He had complete union of the middle and ring fingers in both hands, the union becoming closer and closer nearer to the nails, and the nails being in one piece. A thin web united the little and ring fingers. Superfluous little fingers had been present at birth, adherent by long, thin pedicles. One of these dropped off, and the other was snipped. On the feet all the toes were webbed excepting the little one, and the one next to it; the great toe on each foot was double, the two being firmly united together; the mother showed a scar on her left little finger where a superfluous digit had been removed in infancy. This had been her only defect. Her father had malformations of feet and hands almost exactly like his grandchild. He, as well as one of his sisters, inherited it from their mother, who, as well as one of her brothers, had united fingers. His maternal grandfather also had it, and defects of a similar kind had descended irregularly in various branches of the family, some having superfluous digits, and some only webbed ones.

The following is the list of the mother's brothers and sisters:—

1. A boy, superfluous little fingers only.
2. A boy, no defect.
3. A boy, superfluous little fingers only.
4. A boy, superfluous toe on one foot.
5. A boy, superfluous little fingers only.
6. The mother herself, one superfluous little finger.

Thus none of this family have had similar deformities to their father, whilst his grandchild almost repeats him.

The brothers and sisters of the infant whom I saw were two.

1. The eldest, a boy, with six toes on each foot, superfluous little fingers, and united fingers almost like his brother's.
2. A girl, free from deformity.

No special preference for either sex could be traced in this instance. It will be seen that there was direct immediate, mediate, and diagonal transmission.

Side by side with these defects of growth we often see hypertrophies, one finger too large and its fellow much too small. In such cases it is often difficult to guess whether the dwarfing or the overgrowth was the first step. In all probability they are usually related in some degree as cause and effect, and although perhaps not so as regards origination, yet the one favours the other, just as one twin often starves, dwarfs or even kills its brother by the demand made upon a supply of food not sufficient for both.

There are cases which we feel some difficulty in placing, the question being whether they should rank with the superfluities which we have just been considering, or with those due to fœtal inclusion. In the one case clearly inheritance is possible, in the other not so. I allude especially to cases of double hands.

In 1867 I had an opportunity for examining the hand of a woman in whom the right fore-finger and its metacarpal bone were absent. There was no other deformity. She was not aware that she inherited the defect, and she had six living children none of whom showed it.

I have seen two examples of congenital absence of the radius, thumb and fore-finger. In each the deformity was on both sides and almost symmetrical. In neither instance was there any family history.

In another instance of deficiency of part of the ulna and imperfect development of the upper extremity, the subject, a man named Eaton, had five brothers and sisters with perfectly formed limbs.

Dupuytren's Contraction of Palmar-Fascia.

Gaubius relates as an instance of hereditary transmission the following:—"A little finger of a man began, from some cause or other, to grow inwardly, and became quite bent towards the palm of his hand. The eldest of his two sons, when at the age at which his father became affected with the deformity, observed that his little finger began to bend towards the palm. Different remedies were applied, but in vain. A younger brother employed preventive means, but

without effect. At the same period of his life, his little finger became bent, like that of his father and brother." We have here a good description of what is not infrequently observed in the contraction of the palmar-fascia. The condition of health, or perhaps rather of tissues giving tendency to it, is unquestionably sometimes hereditary, although I think but rarely in a strong degree. It is possible that it is in connection with the arthritic diathesis. The facts as regards its inheritance, the period of life at which it commences, the kind of patients attacked, and its steady progress in spite of all remedies excepting operation, find a remarkable parallel in the case of glaucoma. Most observers agree that the tendency to glaucoma is to some extent hereditary.

DISEASES OF ARTERIES.

(*Continued from Vol. I. page* 333.)

No. VI.—*Gangrene of the Feet in connexion with diabetes in senility—Advancing arterial thrombosis probable.*

I HAVE been attending with Dr. Horace Murray, of Highbury Park, a case of gangrene of the foot and leg, in which the progress of events made me suspect that conditions of arterial plugging similar to those described in my last number were in progress. The gangrene did not limit itself to the foot, but appeared also in the middle of the leg. The case is also an example of gangrene in connexion with diabetes.

I had first seen Mrs. B—— about two years before her death, and she then had a gangrenous ulcer on the left foot, near the base of the little toe, which went down to the bone. I was told by Dr. Murray that the urine had been known to contain sugar for several years. Mrs. B—— was, however, by no means in bad health. A small portion of bone exfoliated, and after a very protracted course the ulcer healed.

Mrs. B—— was brought to my house a second time about eighteen months after the first, and on this occasion it was for a gangrenous spot on the outer side of the heel of the other foot. It was strictly limited. A patch of blackened skin about the size of a five-shilling piece adhered firmly to the bone. A few months later I saw Mrs. B—— again, and the patch in a partly dry condition still adhered at its base, though loosened at its edges. The fatal illness set in in the beginning of May, 1890. Mrs. B—— had now been for ten years the subject of diabetes. Although somewhat gaunt looking, she was still in fair health. Her urine was of high specific gravity (1030), but not in very excessive quantity. The pulse at the wrist was of fair volume, and there was no proof

of calcareous deposit. Her tongue, as often seen in diabetes, was red and morbidly clean, owing to the absence of filiform papillæ. On this occasion, for the first time I visited Mrs. B—— at her home, as she was confined to bed. There had been an acute accession of gangrene. The foot was swollen, and over the dorsum of the toes was livid and cold, without any definite line of demarcation to the sloughing parts. She had had a good deal of pain, but it had now pretty much ceased. I could not find either of the tibial arteries, nor indeed the popliteal, whilst the pulsation even in the femoral itself was very feeble. The integument of the legs was in a state of senile atrophy, much thinned, and covered with the scars of boils.

Dr. Murray and myself carefully discussed the question as to the propriety of amputation above the knee. The state of the patient's tissues, her age (60), and the long duration of diabetes, were not encouraging facts, and we decided to wait and see whether the gangrene spread. I was somewhat influenced towards this conclusion by the fact that my last case of amputation in senile gangrene had not done well (see ARCHIVES, Vol. I. page 326). At the same time I had to remember that in a case very similar to the present one, which I have recorded in the Medico-Chirurgical Transactions, an amputation done under very desperate conditions was the means of saving the patient's life. In that instance the arteries were most extensively calcified, and the urine had contained both albumen and sugar.

I saw Mrs. B—— for the last time on Friday, May 23rd. She had become much worse, and was clearly about to sink. Her face had a leaden, dusky hue. She was sleepy, and when aroused often wandered in her replies to questions. The gangrenous patch on the dorsum of the foot was larger, and there was more general swelling of the foot and leg. A quite separate patch of gangrene had appeared on the middle of the front of the leg. The limb had nowhere assumed the tallowy condition so characteristic of the traumatic form of gangrene. It was slightly œdematous everywhere, and on the back of the calf there was a little redness. There was distinct tenderness over the lower part of the femoral vessels, but I could

not appreciate any swelling. I could not trace the femoral artery much below the groin, and it was very feeble there. The radial pulse was 103, and of fair volume. The hands were cool. The tongue was clean and beef-like, with a tendency to dry. My impression being that the patient had passed the stage in which it was in any degree likely that she could survive an amputation, I did not recommend it.

Mrs. B—— passed into coma soon after my visit, and died the next day. We could not obtain an autopsy.

No. VII.—*Obliteration of one Posterior Tibial Artery.*

My friend Dr. H——, aged 72, tells me that for more than a year he has been cognizant of the fact that the posterior tibial artery in his left foot is obliterated. The popliteal and the anterior tibial in the ankle both beat well, but no one is ever able to find the posterior behind the inner maleolus. On the other foot it is easily felt. The only results of this deficient blood supply are a sense of coldness and weakness in the foot, and some little pain at times. He always walks a little lame on first getting out of bed, owing to sense of weakness in this foot, but after a while it passes off. Dr. H—— is a tall man, of feeble heart, and rather dusky face.

No. VIII. — *On coldness of the feet produced by Tea.*

I advised a lady to drink more tea. "I cannot touch it," was her reply. "Why; what does it do to you?" "It makes my feet icy-cold, and wet with cold perspiration." On further inquiry she assured me that she was quite certain of her facts, and had often tested them. She thought that the perspiration was usually of the soles chiefly. Her hands were, she thought, also made cold, but not so definitely as her feet. I had long been familiar with the fact that tea made the feet cold, but did not know that cold perspiration attended it. It does not do so in all persons. The coldness is caused, I believe, by contraction of the arteries, for the feet at the same time shrink. Alcohol has usually a precisely opposite effect.

No. IX.—*Loco-motor Ataxy in remote connexion with Syphilis—Attacks of Arterial Anæsthesia.*

A case of threatened ataxy was presented in the case of Mr. L——, aged 37, who consulted me on April 23, 1888. His history was that he had had syphilis in 1871, for which he was several months under treatment. He had at the time he came to me a large lupoid sore on the right thigh, of six months' duration, and a large scar on the other knee, which Dr. A—— stated had been a large gumma which he had cured with the acid nitrate. His nerve symptoms were characteristic pains in the limbs, which kept him awake at night. He had no knee jump and the pupils were motionless, the left being larger than the right. The palpebral fissure was narrowed on the right side, and the eye looked retracted. On May 17th he was better, the lupus patch had healed, and he felt well. On Nov. 21 he came again for weakness and heavy feeling in the right eye. The left eyelid drooped. He had had herpes ophthalmicus in the right forehead three years ago after exposure to cold. In Nov., 1889, I again saw Mr. L——; he still had no knee jump, and the stabbing pains were present occasionally. He now complained of numbness in the feet; it was a cold feeling without objective chilliness, in both feet. The sensation was new to him. It seemed to be "arterial anæsthesia." (See ARCHIVES, Vol. I. page 329.)

On Feb. 4th he still had pains, but was better on the whole. The same sensations of chilliness were present in the toes.

No. X. — *Spontaneous cure of an unrecognized Aneurism of the Popliteal. Subsequent development of an aneurism in the fellow limb.*

A case of aneurism of the right popliteal artery was presented in Mr. J. W——, who came to me on October 5th, 1889. He was a tall man, aged 69, but not looking more than 60 at most; he had just returned from N. S. Wales. The history was that he had had a sprain of the muscles of the calf from walking on heavy ground in January, 1889. On the next morning there was some swelling behind the left

knee, which did not beat, and pain in the back of leg. The pain was constant, and he could not walk far, but he continued to do so a little for three or four months. After that he had very bad cramp in the calf for three or four nights, which kept him up all night. During the last of these nights, and after very severe pain and muscular cramp, he suddenly lost all sensation in the foot. The loss began at the toes and passed up to the instep; it alarmed him so much that he called his doctor up in the night. The cramp had ceased when the numbness came on. The numbness was as if the foot were wooden, but no sensation of pins and needles occurred. The doctor said there was no pulsation in artery below knee joint. This was in March, 1889.

On examination of the leg in October, 1889, I found absence of pulsation in the anterior and posterior tibial arteries of the left foot, and some indefinite thickening in the popliteal space. After seeking for the popliteal artery in the left side I turned to the other limb, and to my surprise found a large freely pulsating tumour just above the popliteal space; it extended upwards to the inner side up to Hunter's canal. It appeared to be the size of a fist, evenly rounded and elongated. It had an expansile heaving pulsation. In this limb of the anterior and posterior tibials could be felt. The girth above the knee on the right side was $17\frac{3}{4}$ inches, on the left $16\frac{3}{4}$ inches, with the leg resting flat. His pulse was 100; there was no calcification of arteries apparent.

So little trouble did this aneurism cause, that I was unable to persuade my patient to submit to any systematic treatment. He had not suspected the existence of the condition, and had consulted me only on account of the persisting weakness of the other leg.

DISEASES OF THE NERVOUS SYSTEM.

(*Continued from page* 352, *Vol. I.*)

No. XVI.—*Paralysis of Ocular Nerves at different times and of the sensory part of one fifth Nerve—Repeated treatment at Aix—Syphilis eighteen years ago—Lupus Erythematosus imitated in Syphilis—Locomotor Ataxy.*

Mr. F. K——, aged 49, came to me Sept. 10th, 1885. He was a widower when seventeen or eighteen years ago he had syphilis. It was a mild attack. Having married again fourteen years ago he had a second family, all of whom are living and healthy, the eldest being aged 13. Five years ago his right eye failed, and "he was obliged to shut one eye in order to see singly." He was told that he must take mercury. He had at that time lost the power of his lips, and had a feeling of dampness in them; he was also very nervous. He went to Aix and saw Dr. Brandis, staying five weeks and using inunction. After returning from Aix (eighteen months before I saw him) he had paralysis of the right third nerve. "The lid drooped and the eye went outwards." He again went to Aix, and stayed a long time and got quite well of his symptoms in the eye. He had never had any headache or pain. He has been altogether four times to Aix, always on account of eye symptoms and because he "was nervous"; the treatment there always did him good. He could always eat and sleep well, and throve on the inunction. He has had "deadness of the face" on the right side which has never quite disappeared, and his tongue has a feeling "as if covered with flannel." There are scars on the forehead and temple from a severe attack of herpes frontalis which occurred when under treatment at Aix a year ago. He has occasional rheumatic pains in

his legs and a sort of nerve twitching. The knee jump is quite lost, he thinks for some years; the pupils are small but equal; they scarcely dilate on shading, but act in accommodation. Lupus erythematosus began on his ears last winter, which he took to be chilblains. It was, when he came to me, very characteristic, spreading over his nose and cheeks in irregular patches which leave very thin pale scars when they recede. He still has scaly patches on his ears, chiefly on lobules. Sept. 22nd: The erythema-lupus is much better, on the right side it is almost gone; the patch on the left temple is still bright. He had chilblains almost for the first time last year. On Jan. 14th the face was quite well, but there has been a return of double vision. On Feb. 26th the diplopia had disappeared on the patient's being salivated. On Feb. 16, 1887, the patient reported his lupus erythematosus as having been quite well, excepting a lump like a chilblain in the lobule of the left ear. He has had two gastric crises and the right eye had diverged. He has some deafness and hissing noise in the right ear, and cannot hear the watch at more than half-an-inch. The affection of the ears has only been present three months.

February, 1890.—I have seen Mr. H—— several times recently. He is in fair health and quite free from lupus, but his ataxic symptoms slowly increase.

No. XVII.—*Herpes of the forearm and hand whilst taking Arsenic. Numbness of the fingers as a result.*

An elderly lady named J—— consulted me on account of an attack of shingles which had affected her forearm, fingers, and palm of hand. It had faded away when I saw her, but enough remained to show its character definitely. She had been taking liquor arsenicalis m xiv. three times a day for ten days before the herpes appeared. It had been ordered on account of chronic eczema on the scalp, by a medical friend.

This lady consulted me again six months later (on November 10th, 1890). I had forgotten all about her

shingles. She now complained that her finger-ends were numb. The fingers affected were the middle, index, and the thumb. I carefully tested the two sides of the ring-finger, and found its radial side a little numb, whilst the other was not so. She was much troubled about the numbness, as she often could not use her fingers well for writing, and could not put her thimble on.

This case illustrates several important points. First, the influence of arsenic in producing herpes zoster; secondly, the occurrence of zoster on the forearm and hand; and thirdly, the production of numbness as a sequel of zoster in parts still more peripheral than those affected by the eruption. The first—zoster due to arsenic—is in my experience tolerably common. The second—zoster on the hand—is very rare. I have very seldom indeed seen zoster lower on the upper extremity than the elbow. It does, however, occasionally so occur, and here we have an example. As regards the last point, numbness of the skin supplied by the nerves implicated, it is according to ordinary rule. In this instance the numbness attracted the patient's attention more definitely because the fingers were the part affected. Zoster is a neuritis of a sensory nerve attended by an eruption, and it always more or less disorganizes the nerves implicated. The older the patient, the greater usually the degree of disorganization and the severity of the after-symptoms.

No. XVIII.—*Patient a young woman — Failure of sight without ophthalmoscopic changes—Hysteria suspected—Loss of use of the lower extremities, and total blindness — Complete recovery with white discs—Absence of menstruation for ten years—A brother also the subject of optic nerve changes.*

It happens not unfrequently in the course of consultation practice that a case which was at the time of its occurrence obscure and of uncertain diagnosis receives important elucidation by the reappearance of the patient, after a long interval. This has occurred to me in the case which I am about to relate.

A young lady whom I had seen several times in 1884 on account of failure of sight without obvious changes in the eye, passed from under my observation. She had an illness at home which confined her for some time to her bed, and concerning which I heard indirectly that the physicians who saw her considered it to be hysteria. During this illness she lost the use of her lower limbs and became for a few days quite blind. Her subsequent complete recovery was supposed to confirm the diagnosis of hysteria, and to negative that of neuritis (which I had given). I did not see the young lady between 1884 and 1890, and only heard indirectly that she had made, as I have said, a complete recovery. In January, 1890, her brother came under my care suffering from very peculiar eye symptoms, one element of which was pallor of the optic disc and appearances suggestive of long-past neuritis. He told me that a sister of his had been through an illness attended by blindness. I did not at the time identify my former patient, but thinking from what he said that his sister's case might throw some light on his own, I asked him to bring her with him at the next visit. I then found that his sister was the patient referred to above who had consulted me for failure of vision and other symptoms. I sought my notes of her case, and found the following on May 27, 1884:—

Age now 23. She is pale, forgetful, and very sleepy; she thinks that the sleepiness is due to her not being able to see. She trembles much, as if cold; walks feebly; sleeps well, but has to get up to make water in the night; she has once fallen down. No menstruation for four years; was seen by Sir Andrew Clark three years ago (July, 1881). Her urine is reported normal. She thinks her sight first failed six days ago and feels sure she could see well formerly. It has got worse during the last day or two. With the right eye she reads $\frac{20}{40}$ before and after atropine, with the left not $\frac{20}{200}$. The left disc is rather pale. No positive neuritis made out.

On June 6th she could read only 100 at 18″ with left, with the right No. 8 Jaeger and $\frac{20}{200}$. The general symptoms were as before.

It was just after the above notes were taken (May and June, 1884) that Miss S—— was, as I have said above, confined to her house by increasing illness and I lost sight of her. I had diagnosed descending neuritis, and was in expectation of seeing definite changes in the dics. I heard subsequently several times from my friend Dr. D——, under

whose care she was, that she had been seen at home by one or more physicians, and that the diagnosis was, although with some misgiving, "hysteria." I can give no more definite information respecting this illness than that she lost the use of her lower extremities, and became either blind in both eyes or alleged that she was so. The condition referred to lasted only two or three weeks, and then she began to improve. Throughout the illness she had distressing headaches.

Miss S——'s recovery was finally all but complete. She regained the use of her lower limbs and her sight. She, however, never menstruated again. When she came under my notice in 1890 there was the most conclusive proof that her loss of sight had been due to neuritis, for the discs were now very pale and to some degree atrophied, and their edges were ill-defined. The diagnosis of past neuritis was given without hesitation by my son, to whom I showed the patient without communicating her history. Although the discs were in this condition, Miss S—— could see almost perfectly. She had regained the use of her legs so far that she could walk well any moderate distance. She was still a very nervous, excitable girl, and might have been easily supposed to be hysterical. She was reported to be impulsive, incapable of the slightest application, and to suffer much from nervous headaches. Thus she was quite unable to give any assistance to her sisters in a school which they had. She was exceedingly thin.

It is a point of some interest to ask what the precise nature of the illness was which Miss S—— passed through. Let us remember that it occurred to a nervous, hysterical girl who had not menstruated for four years, and in whom excessive masturbation was very possible. It consisted in an affection of the nervous system which revealed itself in a descending optic neuritis with headaches and paraplegia, and it was only transitory in duration, being followed by almost complete recovery. I make the suggestion of masturbation without having any facts to support it, for no questions were asked. It may easily be the fact that it is a very unjust suspicion.

There were other facts which seemed to indicate a family tendency to nerve disorder. Thus a younger brother has had defective sight from early boyhood, and his discs show evidences of past neuritis.

Dr. Buzzard devoted the Address with which he entered upon his presidency of the Neurological Society to an examination of what may be called the physical basis of hysteria. His remarks were very ably directed to the endeavour to show that the more the subject is studied, the more definitely are the phenomena of "hysterical" affections found to be dependent upon organic changes.

The case which I have recorded is one which will, I trust, be of some interest to my distinguished neurological colleague. The case might have been called "hysterical amaurosis;" indeed it was so called by several who saw the girl. When she became paraplegic, and alleged that she could not see, that diagnosis was persisted in. Her recovery seemed to confirm it. Had it not been for the ophthalmoscope the believers in functional defect might have triumphantly claimed the case. It might even have been thought to have been one of feigning. The state of the optic discs, however, makes it certain that the blindness was real, and due to inflammation of the optic nerves. We are surely justified in believing the paraplegia to have been of the same nature.

SYPHILIS.

No. XVIII.—*Are women liable to transmit Syphilis to offspring during longer periods than men?*

It seems probable that women who have themselves suffered from syphilis, and borne syphilitic offspring, retain the liability to transmit the disease much longer than men do. In my experience, if a series of children, one after the other, all suffer from inherited taint and show infantile symptoms, it is almost invariably the fact that the mother has had the disease. On the other hand, the cases are numerous in which the eldest only suffers and the rest are healthy, and in these the inheritance is usually from the father, the mother having never shown symptoms. Of course, even in these, it is to be admitted that probably the mother has received a protective infection (Colles' law), but not such a one as involves communication of the disease in an active form. This persistence of taint in women may possibly be explained by the fact that men usually secure longer and more efficient treatment than women do, or it may be due to some infection of the whole ovary and of all ova in the first instance. This latter supposition is the one which has been advanced as explanatory of the Lord Morton Quagga phenomena, and, though certainly not proven, it is a possibility which cannot be ignored.

In the following instance it would appear that the wife, who had before marriage suffered from syphilis, retained the power of producing tainted children eight years at least after her acquisition and in marriage with a healthy man. During this period she herself suffered but little, nothing indeed that was

definite, though it is probable that on several occasions she took specifics for short periods.

The rule of a two years' interval between syphilis and marriage in the case of a man appears, with exceedingly rare exceptions, to be trustworthy, but it may possibly be the fact that a much longer interval ought to be enforced in the case of women. It is, however, very certain that not all women who have suffered from syphilis continue to transmit it for long periods.

Mrs. B——, now aged 26, stated candidly that she had borne an illegitimate child at the age of 18. This infant died after a few months. She herself suffered from "the disease" at the time. An opportunity of marriage occurred to her about a year later, and she accepted it. Her husband was a respectable man, considerably older than herself, and concerning whom she feels confident that he never, either before or since his marriage, suffered from syphilis. She bore no children until two years after her marriage. A girl was then born who had slight infantile symptoms, who required treatment for a few months, and then got well. This child was brought to me for inspection (January, 1890). She is now five years old, a florid, pretty child, showing no indications of syphilis in her physiognomy. She has, however, a bald patch in the middle of her tongue, and her central incisor teeth are rotting away. A younger child (born two years later) also suffered in infancy. At the present time (aged three) he has superficial abruptly-margined ulcers extending over his palate. His incisor teeth are exactly like his sister's, and are rotting away at their crowns. His head is large and somewhat irregularly formed, but it cannot be said that there are definite bosses.

It is very remarkable that both these children should show symptoms of syphilis *in the mouth*, and in a chronic form. There appears no reason to distrust Mrs. B——'s statement, although various fallacies might be suggested. She has herself, at various times during her married life, been under treatment for glandular enlargements in the neck and other conditions which she attributes to "the disease," but there does not appear to have been anything very definite.

No. XIX.—*Congenital Syphilis—Disease of Testis at a very early age.*

T—— H——, aged five months, the third child; two others living, who are said to have had no symptoms. He snuffles badly, and has a dull, shiny, slightly scaly rash on face; withered aspect, and unusually well-marked hydrocephalus. There is considerable enlargement of right testis and epididymis, the cord is also slightly enlarged; it has been noticed six weeks, and is hard, painless, and not tender. The swelling is irregularly flat-sided (because involving epididymis), and it is uniformly hard.

No. XX.—*Not Struma but Syphilis—A fragment in connexion with the history of Diagnosis.*

As an item of medical history, the appended extract is perhaps worth preserving. It is from the Hospital Reports of the *Medical Times and Gazette*, under date, June 27, 1857, and was written by myself (anonymously). In it for the last time I applied the term "strumous" to the interstitial form of keratitis, now so generally recognized as due to inherited syphilis. The extract is of course given verbatim, and it will serve to show well the puzzle which the disease in question at that time presented. It shows also that the very peculiar clinical features of the disease, its remarkable tendency to spontaneous recovery, and the freedom of its subjects from obvious signs of scrofula, were well recognized. My papers upon it, in which for the first time it was claimed as a consequence of inherited taint of syphilis, appeared in the Moorfields Hospital Reports in 1858, and were reprinted in book form in 1870. Since then I believe I may say that all authorities in England and America have accepted the diagnosis, although it has not yet been quite so on the Continent:—

STRUMOUS (?) CORNEITIS.

"Mr. Critchett has devoted a very instructive portion of one of his excellent Clinical Lectures on Diseases of the Eye to the attempt to show that what is known as "strumous corneitis" is a disease of the causes of which we know very little, and over the progress of which no remedies have yet been proved to

possess any power. We speak of that form of chronic corneitis which occurs about the age of puberty, or from 20 to 35, and in which the whole cornea assumes a condition resembling ground glass. It usually affects first one eye, and then, after a month or two, the other also, and is never attended by ulceration. Mr. Critchett's statement is, that he has fairly tried all the vaunted remedies—mercurials, iodides, tonics, counter-irritants, &c., and has arrived at the conclusion that the disease is one which runs its own course despite of treatment, and in which, consequently, active meddling is worse than useless. The cheering part of the story is that its natural termination, even under circumstances the least promising, is always in complete recovery. The disease is a very well marked one, and very distinct from the common forms of ophthalmia. It is a rare affection, but the large field of observation afforded by the Moorfields Ophthalmic Hospital brings not a few examples of it under notice. One of such, of unusual interest, is now attending. Mary Ann H., aged 18, stout and florid, and not presenting any specific indications of struma. She was admitted in February of the present year with double corneitis. The right eye had been first affected about nine weeks before, and in spite of the treatment adopted by the medical man under whose care she had been, the disease had steadily advanced, and two weeks ago had attacked the left. The right cornea was so opaque that she could only just distinguish light from darkness; it was slightly conical in the centre, and presented a peculiar pink appearance. The left was in a similar but less advanced condition, and in both there was considerable sclerotic congestion. Menstruation was regular, and, excepting a feeble circulation, no indication of cachexia existed. Mr. Critchett ordered the Griffiths's mixture in ounce doses three times daily. The girl has attended regularly from that time to the present. At first the disease progressed steadily. For three months the patient was totally blind except to the perception of light, and so hopeless was the aspect of things, that Mr. Critchett several times remarked to his class that it was the most severe case of corneitis he had ever seen, and that he feared it would constitute an exception to the rule he had endeavoured to establish, that the disease was always recovered from. Ultimately, however, the case has falsified the fears entertained, and conformed itself to the rule referred to. The same tonic treatment has been continued throughout; and during the last six weeks so much improvement has taken place, that there is now every reason to expect that both corneæ will eventually clear."

I do not know what to write as to whether general opinion has changed as to Mr. Critchett's opinions on treatment. There is no doubt that many cases of interstial keratitis resist specifics in the most remarkable manner, and that the disease often appears to run its course unchecked by them. In others, however, mercury does appear to cut the processes short, and to prevent the case passing into the more characteristic stages. That specific treatment should not have more definite results, and that, in a disease in which the diagnosis is so certain, we should still be in a position of

any doubt as to their efficacy, is certainly remarkable. Some of the worst cases which I have ever seen were in patients to whom mercury had been freely given; and, on the other hand, I have seen the occurrence of ptyalism put an end at once to pain and intolerance, and initiate a recovery which was afterwards uninterrupted.

No. XXI.—*Deaths from Inherited Syphilis in England and in Ireland compared.*

A statistical table, prepared by the Registration Office of Ireland for the use of the Vaccination Commission, shows that the number of deaths from inherited syphilis is steadily diminishing in that country. In 1865 the number of deaths from inherited syphilis registered was no fewer than 141, whilst in 1888 it was only 47. It is true that in the year preceding 1865 it had been only 107, and that in the year following it (1866) it fell suddenly to 75. But it rose again to 88 in 1867, whilst from that year onwards, with some irregularities, it has been declining. In 1887 it was only 31. It must be remembered that during the period concerned the population of Ireland had declined one-fifth. This decline in the mortality from infantile syphilis may be explained by reference to three considerations: 1. Improved treatment of infants affected; 2. Improved treatment of syphilis in the parents; and 3. Far greater caution on the part of surgeons in permitting marriage during the early years after an attack of syphilis.

In England there appears to have been a slight increase in deaths from inherited syphilis during the period in which in Ireland there has been a reduction. Thus, in the years 1863–7 the annual deaths from that disease per million births was 1,509; in 1873–7, 1,749; and in 1883–7, 1,884.*

Possibly the real explanation of these variations in both countries, and of the apparent discrepancy, is that in Ireland the population of towns is decreasing, whilst in England that of rural districts diminishes in relation to that of cities.

* I am indebted for these figures to the kindness of Dr. William Ogle.

No. XXII.—*Colles' Law—Is Protective Infection in any degree inherited?*

Under Colles' law, a woman who has borne to a syphilitic husband a syphilitic child becomes, although she has never herself shown any symptoms, protected against contagion. She may suckle her tainted child, and will not, as a wet-nurse might, get a chancre on her nipple. Now it is well known that often in such marriages the eldest child alone suffers, and that there may be a succession of healthy ones afterwards. Respecting these apparently untainted offspring of a father who has recovered, and a mother who has had the disease only in a modified form, some interesting questions may be suggested. Will they inherit in any degree their mother's protection? It may be this possibility explains the general belief that syphilis becomes milder in communities in which it has long and extensively prevailed. It may also explain the remarkable irregularities in the severity of the disease in different individuals.

DISEASES OF THE SKIN.

No. XXXV. — *Serpiginous Nævoid condition in the Skin (Nævus-Lupus).*

The following notes of a case similar to the one illustrated in Plate IX. of my last Archives has been kindly sent me by Dr. Allan Jamieson of Edinburgh. It will be seen that we have in it an example of an infective nævoid process, spreading by its borders and producing satellites. In these features it approaches lupus. In my case there was a history of a nævoid stain at birth. In Dr. Jamieson's this history was absent, but for all that there may have been some congenital vascular peculiarity. I give the narrative in Dr. Jamieson's words:—

"A. T., 19, a tall, well-grown lad, came to the Edinburgh Royal Infirmary on Nov. 7, 1888. He stated that three or four years previously, after practising on the horizontal bar, he noticed a small red spot on the front of the right forearm, and since then the marks have slowly but steadily extended. The eruption, if such it can be called, is found scattered over the deltoid region, on the extensor and flexor aspects of the upper and fore-arm, and can be traced, though faintly, over the radial side of the wrist on to the back of the hand as far as the root of the thumb and forefinger. It consists of minute puncta, some set closely together so as to form groups, others isolated, some arranged in lines. The individual puncta vary in size from the diameter of a small pin to points scarcely recognizable unless with the aid of a lens. The larger are a dark, the smaller a clear red. In the spaces between the grouped puncta the skin is stained a faint pink. Pressure causes the smaller ones to grow faint, the staining to vanish, but in a few seconds the colour is restored. There are also several groups to be seen running along the inferior margin of

the fifth rib on the right side, from one inch inside the nipple to the margin of the sternum, the largest group lying next the nipple—the puncta here are clear and sharp and have no intermediate staining. There were no subjective symptoms. A small piece was removed from one of the groups on the arm, and serial sections were made from it after hardening by Dr. Edington. The horny layer of the epidermis was normal. The rete mucosum was also normal, but processes ran down from this in the spaces between the cones deep into the corium. The vascular loops at the apices of the papillæ were dilated into wide spaces, some of which still contained blood. The condition was evidently that of a very superficial capillary nævus, spreading by the formation of satellites—the isolated puncta. The process was perhaps started by strain of the minute muscles of the skin in gymnastic exercises."

No. XXXVI.—*Lupus Lymphaticus with Nævus.*

I find that Mr. Bryant has recorded in the Pathological Society's Transactions of 1858, Vol. IX. p. 186, one of the earliest examples of this condition affecting a congenital nævus. The paper is accompanied by a coloured portrait, and a model is preserved in Guy's Hospital Museum. The boy, who was aged four when under Mr. Bryant's care, was born with a small red nævus on one buttock and general enlargement of the veins of the leg. The little nævus grew, and assumed "a warty and cystic" condition. The so-called "warts" were "soft and spongy, of a deep purple or red colour, and easily bleeding." "The cysts were at times developed in them, or rather appear as if they were formed from them." The portrait shows a long irregular patch on the buttock in a condition somewhat resembling lymph-lupus, but far more nævoid in character than in my cases. This condition is exactly that which was shown in the case exhibited at the same Society by Dr. Tilbury Fox in 1879 (see page 470, Vol. XXX.).

No. XXXVII.—*A peculiar form of Lupus with vascular tufts in scar—Ulceration of Ears.*

A remarkable example of destructive ulceration of the outer

part of the ear is sent to me by Dr. Batteson, of Bow. The patient, now a healthy-looking man aged 39, suffered in boyhood from what was then considered chilblains of the ears. He thinks it began about the age of nine and was bad until the age of fourteen, and then gradually got well spontaneously. He believes that his ears were usually worse in winter. He had chilblains also on his hands and feet, but these did not ulcerate. Before he was twenty his ears had got quite well. About four or five years ago a patch of lupus of a peculiar mixed form showed itself on the cheek of the right side just in front of the ear, and two or three years later a similar patch in the middle of the left cheek. The latter patch has left a condition of things exactly like that in Miss H——'s case; the peculiarity in both those two cases is that the scar tissue contains a great number of punctate vascular enlargements, little tufts which dot over the surface of the scar. Both in Miss H——'s case and in this the scar has in part resulted from the use of caustics, by which the lupoid disease is cured. Around the edges of the patch, as was the case in Miss H——, there is a little dusky erythema, quite different from the punctate condition of scar, and which probably represents the original condition of things, and shows a still existing tendency to spread.

A large irregular scar which has been left in front of his right ear is also slightly vascular, but not nearly so conspicuously so as that on the cheek. He states that the patch on the cheek frequently burns, while that on the other side seems quite cured.

Three near relatives have died of consumption, a brother and a paternal uncle and aunt. The condition of the ears is quite symmetrical. On each side the lobule of the ear, and the helix extending from the lobule three parts up the ear, has been destroyed.

The portrait of Miss H—— (see Plate 10, Archives, Vol. I.) shows exactly the conditions present in the scar in this case. They were very peculiar.

No. XXXVIII. — *Recurring Alopecia — History of Ringworm in the family.*

Miss A——, whom I saw on March 19, 1890, had a patch of alopecia which had only made its appearance a week before. She came in order to ask the question whether it was safe to go to a boarding-school on the Continent. Her history was peculiar. She was only fifteen years of age, but it was six years since her first attack of alopecia, and on three several occasions since the hair had grown and fallen again. It was four years since the last attack. It was not certain that she had ever had ringworm, but it had been in her family—brothers and sisters—seven or eight years ago. Thus it is clear that her first patch might have been ringworm, but the description was definite that it had been as smooth and clean as the present one, and respecting the latter there could be no doubt as to diagnosis.

No. XXXIX.—*Congenital Xeroderma (Ichthyosis) in slight form as a family disease—Diffuse Keratosis of palms and soles, developed in middle life as a result of excessive walking.*

J. W. M——, aged 42, consulted me on April 22, 1889. He presented an example of keratosis of palms and soles, with dryness of skin. Three of his sisters have xeroderma; he has five sisters and no brothers. His father had "hard hands." He has been married seventeen years, and has five healthy children; none of his children inherit dry skins, nor do those of his sisters, two of whom have families. He is a short stout man. His occupation is that of a traveller, walking and standing all day, sometimes doing twenty-five miles a day. It seems probable that he never had syphilis, though he had gonorrhœa twenty-one years ago. His chief complaint is the dry palms and soles, with a slight form of general xeroderma. Another complication has arisen lately which consists of some groups of red spots on fronts of elbows, groins, and about the ankles. He never could perspire well. He has lived freely, and not been more abstemious of late. His heels have been very horny

and have peeled. Between his toes the skin is white, thick, and soddened. He gets hot by exercise, but very rarely perspires. He likes hot weather, and has of late felt chilly. On the soles are thick masses of yellow horny epidermis, which peel off; over the heels the thickened epidermis was cracked. His palms and soles have itched very much.

August 27th, his soles were very much better, partly by rest and partly by arsenic. He has been using cork soles and tar ointments. The elbows and groins are now quite well.

No. XL.—*An eruption affecting the trunk only, and resembling those due to irritation from the vest but without any reason to suspect such causation.*

A lady aged 33, married, very stout, but apparently in excellent health, consulted me for one of these eruptions, under conditions which made it difficult to suspect the vest, for she had worn nothing next the skin of a woollen nature. She said that she could never bear wool to touch the skin, and that she always wore a thin cotton material. Her eruption, however, affected precisely the vest regions, that is the trunk, shoulders, and upper parts of the fore limbs. There were no spots on the head, neck, face, legs or arms.

When I saw Mrs. R. S—— (March 9th) the eruption had been out for a fortnight, and she had already had some treatment. It was plentiful, and consisted of erythematous spots of irregular forms, but seldom round, and which soon began to desquamate. There was no scale accumulation, nor any moisture. Between the breasts the spots were so abundant that they were almost confluent, and here the eruption threatened to assume the form of eczema. The spots were of a dusky tint, and excepting that they were desquamating might easily have been taken for syphilis. The history of its beginning was that it had first shown itself after she had been eating some fish, but it did not begin by a general outbreak, but by the appearance of a single patch on the abdomen, which she said looked like a ringworm. Within a few days other spots showed themselves on the chest, and the eruption assumed the present pro-

portions. It had itched a good deal and she had rubbed it. None of the patches were in the least like urticaria, and it seemed very doubtful whether their occurrence had anything to do with diet or stomach disturbance. In essential features the eruption was exactly like others which I have described. It did not resemble ringworm, but few of its patches being round, and none of them in the least papular in their margins.

The case may be claimed by some as one of the group now known as pityriasis rosea.

No. XLI.—*Elephantiasis after Phlegmasia Dolens.*

In some cases of smooth elephantiasis in women the disease has taken its origin in the œdema which attends pregnancy, or in an attack of phlegmasia dolens after delivery.

The following case may illustrate this form of the disease. Mrs. L—— is a tall, remarkably fine-looking woman. She first came to me on April 19, 1884, being then 28 years of age. Her right leg was very much swollen, and had a large patch of red eczema. It had been inflamed, she said, for three years, and had been a little swollen for seven. The starting point was a much swollen leg during pregnancy, which never afterwards quite subsided. I prescribed lead and spirit lotion, and made her keep the couch. In the course of a few months the eczema was quite well and all sores healed, the œdema also being much reduced.

In the spring of 1885 Mrs. L—— returned with another attack of acute œdema in the same leg. A large bulla had formed.

In March, 1887, another similar attack occurred. The skin was red, and pitted on pressure. Although Mrs. L—— was well enough to come to my house, the attack was clearly of the type of erysipelas. She told me that during the last two years her leg had been almost well, and had allowed her to go about as usual without a bandage, but that it was permanently larger than the other, and always bulged in a roll over the top of her boot.

It is scarcely needful to remark that these recurring attacks

of erysipelatous swelling are essential parts of the development of elephantiasis. Each attack usually leaves the affected region permanently more swollen.

No. XLII.—*Acute Inflammation of the Spleen in association with Boils—Great enlargement—Abscess suspected—Long-continued high temperatures. Recovery.*

The following extract from the letter of an intelligent patient reporting his own case (in anticipation of his consultation) has interested me, and may prove of interest to my readers. Acute inflammation of the spleen is very rare in English practice, and that it should produce a condition suggestive of abscess is still more so. The long continuance of high temperatures and the completeness of the final recovery are also features of much interest. There was no trace of splenic enlargement when I saw the patient (two years after the date to which the extract refers), and he was then in good health.

"In the winter of 1886–7 I had two or three small carbuncles, which had to be lanced; also one or two very bad boils during the summer of 1887. At the beginning of November, 1887, I suffered pain and inconvenience from what I supposed was bad indigestion, especially pain on the left side, and on consulting my doctor he said I had better go into the country and enjoy myself; but I had to lay up, and, to his astonishment, when my wife suggested his taking my temperature, he found it was 105. A second opinion was called in, and I was immediately put to bed, where I remained for two months with an attack of acute inflammation of the spleen, and fever. A third gentleman said I must be 'knifed,' as it was 'an abscess on the spleen.' Fortunately Mr. D——, who was consulted, would not do it, but tried me with a needle, and proved that there was no abscess. I got well enough by the second week in February to go abroad for three months, and this quite put me up for a time. The boils, however, came on again every now and then, and I had a baddish one in my

leg, which healed by about the 9th of August. I have only just recovered from another one."

In searching for a cause for the spleen disease nothing definite could be made out. The patient was a man of 45, who had never resided out of England. He had an idea that he has suffered from some sort of ague, contracted at Torquay, when he was a lad of 15; but nothing had happened since to remind him of it. He had enjoyed good health, excepting the small carbuncles, up to the time of his acute illness with enlarged spleen. The illness was ushered in by chilliness, and it was this which led his wife to ask that the thermometer should be used. He assured me that for a month or more his temperatures varied from 104 to 105, and even to 106. The spleen was, he said, very obviously enlarged, even visibly so. One physician who saw him gave a confident opinion that there was abscess, and an operating surgeon was called in expressly to make an incision. Fortunately he declined, and the exploring trocar was used instead, with the result of obtaining only blood.

I could not ascertain any special cause for his liability to boils, which has now continued over two years. His urine has been repeatedly examined, and has never contained sugar. He looks well, and says that if he could live always in the country he feels sure that he should ail nothing. He suffers occasionally from indigestion.

Comments.—It will be seen that for the most remarkable points in the above case I trust to the patient's statements. He was, however, a highly educated man, and he had understood well what had taken place at his bedside, his medical advisers having treated him with confidence. Acute engorgement of the spleen, productive of such enlargement as to be taken for an abscess, is probably an exceedingly rare event. I have never myself seen such a case. The narrative is, I think, of great value, not only in reference to a diagnosis of a very critical kind, but also as to prognosis. Who could have foretold that a spleen enlarged to such a size would subside spontaneously and completely, and leave the patient again in good health?

ON RHEUMATISM AND GOUT.

(*Continued from page* 360, *Vol. I.*)

No. VI.—*Last-joint Arthritis affecting chiefly the fingers—No history of Arthritis in family known.*

Dr. W—— was kind enough to send me on June 26, 1882, a remarkable example of this affection. All the digits of the hands were involved. In every finger the last joint was disorganized and the end clubbed. The nails were made opaque and fibrous. The ring fingers in each hand were slightly less affected than the others. The joints of the toes were very slightly affected, if at all, but their nails were rough.

Mrs. W——, aged 47, is a thin, rather delicate-looking woman of dark complexion. She never had any form of rheumatism until this commenced. She was then living in Brussels, and it was during midwinter that it began. She was not in any way exposed to cold or weather. The swelling began very insidiously, and there was not much aching. Gradually the swelling increased and the nails became opaque. Then there was some aching, but never severe pain.

No history of arthritis is known, but the family history does not go far back. Mrs. W—— has several children and they are healthy. She has not had any iritis.

When a girl she suffered a little from chilblains, but not very much. She has never been strong, but never specially ill. She used formerly to have very cold hands and feet —cold even in summer. Now they burn.

No. VII.—*Dupuytren's Contraction of Fascia affecting the soles as well as the palms.*

A man of about 55 had been the subject of Dupuytren's contraction of the palmar-fascia for several years. In his

hands it was symmetrical, both little fingers being pulled down, whilst the ring finger was only slightly affected. The interesting point in his case was that his feet were affected also. There was not any material contraction in the soles, but a long lumpy band of thickening in the plantar fascia. He appeared to be in good health, and was a florid man, not at all unlike a subject of gout. He did not admit, however, that gout had ever been known in his family. He had a lump as big as a hazel-nut, and almost as hard, in the lower part of the epididymis of the left testis; this had caused no symptoms. He said that of late he had been much kept awake at night by a curious pricking pain in his hands and feet. He had suffered from chronic rheumatism, and his left shoulder was considerably stiffened. He had been using galvanism lately, and considered that the pricking pains referred to had been made worse.

No. VIII.—*Arthritic changes induced by injuries in a brother and sister, both young, who inherited Gout.*

An interesting example of the importance of the family history, and of the manner in which rheumatic gout may be localized by injury, came under my notice in February, 1884. Mr. J——, a young gentleman, aged 20, was brought by his mother on account of pain and stiffness in the wrist and elbow remaining after a fall from his bicycle some months before. I found that his grandfather had suffered severely from gout, as also other members of the family. Having expressed my opinion that it was this inherited tendency which was the cause of the persistence of the swelling, his mother remarked it was wished that I should see his sister also. In the sister's case I found that great enlargement of the carpo-metacarpal joint of the right thumb had resulted from a sprain, and there was the further history that she had formerly been laid up for a year with chronic inflammation of one knee in consequence of a sprain. She was a florid girl of twenty, and had often suffered from rheumatism. Both she and her brother were accustomed to take wine and beer moderately.

No. IX.—*Ankylosis of wrist after Gonorrhœal Rheumatism.*

Mr. A—— (Sept. 19, 1888) afforded a good example of complete ankylosis at the wrist as a sequel of gonorrhœal rheumatism. The wrist was perfectly straight, and the ankylosis appeared to be absolute. A noteworthy feature was that pronation and supination were perfect. He said that he felt very little inconvenience from the condition, and could do almost anything with the hand. I have seen several other cases in which the entire loss of the radio-carpal joint has seemed to entail very little inconvenience. The important point is that pronation and supination should be retained.

No. X.—*An exceptional form of Dupuytren's Contraction of Palmar-Fascia.*

In a very large proportion of instances Dupuytren's contraction of the palmar-fascia affects the two ulnar fingers. The ring finger is often drawn down into the palm, and the little one more or less so, in cases in which all the others escape. I do not think that I have ever seen the middle finger affected alone to the entire exemption of the two first named, excepting in the instance about to be related. The patient was a gentleman of 80, of very large frame, and looking like a subject for gout, but who denied any history of that disorder either in himself or his family. His middle fingers in both hands were contracted until their tips almost touched the palm. None of the other fingers were contracted in the least, but there were lumps of induration in front of the thumbs and of one of the ring fingers. The symmetry of the condition was remarkable, proving that the preference of one part of the palm to the other was under the influence of some definite law of causation. The old gentleman was the subject at the same time of a peculiar form of leucoderma, which affected chiefly his fingers. This he said had been in progress many years.

No. XI.—*Gonorrhœal Rheumatism in a patient who inherited Gout—Slow recovery, with partially stiffened joints.*

I saw a gentleman named W——, aged about 25, with Dr. J——, at W——. His father had suffered much from gout. At the time of our consultation Mr. W—— was in bed, suffering from a severe attack of gonorrhœal rheumatism affecting one wrist and one instep. It was believed that he had sprained the instep in jumping from a boat, but whether this had much to do with it was questionable. He had been confined to bed for some weeks, and had suffered extreme pain. I saw him for a second time at my own house, about three months later, on his return from Bath. The wrist was stiffened to a considerable extent as regards flexion and extension and lateral movements; pronation and supination being perfect. The instep still remained somewhat swollen and painful, so that he could not walk well. He was tall and of dark complexion. At the time that the rheumatism set in he was suffering from gonorrhœa.

No. XII.—*An example of Hot Eye in connection with inherited Gout.*

A sister of Miss R——, whose case I have published in my lecture on the subject of inherited gout (see p. 379), has long been the subject of "Hot Eye." During these attacks, which have affected almost exclusively her left eye, the globe becomes red and hot with considerable pain. The attacks usually last a few days, and she says nothing does them so much good as a blister. When they pass off the eye is quite well. Having regard to the facts that her sister presents a most marked example of the destructive iritis of inherited gout, and that their relatives have suffered very severely from true gout, I think there can be little doubt that these attacks are of the same nature. It is interesting to note that they leave the eye quite undamaged. One of her aunts has lost both eyes from iritis.

NOTES ON THE CANCEROUS PROCESS AND ON NEW GROWTHS IN GENERAL.

(*Continued from Vol. I., page* 219.)

On the Spontaneous Disappearance of Malignant New Growths.

Whether new growths can disappear by spontaneous absorption is a question of some importance in reference to their essential pathology. In a general way we recognize it as an important and perhaps the paramount distinction between the products of inflammatory action and new growths, that the one are, and the others are not, capable of spontaneous removal by resolution or absorption. Yet we recognize a form of "atrophic scirrhus," and as an exceptional event I suppose that most of large experience have witnessed the shrivelling and disappearance of swellings which they had diagnosed as malignant neoplasms. Under such circumstances the diagnosis may not unfrequently come under suspicion. The disease known as Duhring's Neoplasm, or Granuloma Fungoides, is characterized by the spontaneous disappearance of some growths, whilst others are developing. For myself I may confess that I hail with pleasure all facts of a nature to break down the too strongly marked lines of distinction which it is customary to draw between inflammation and new growth. As such I record the following case, not the only one of its kind which I have seen, but certainly one in which the phenomena in question are well marked.

Miss K——, a dressmaker, aged 27, was sent to me by Dr. Cummings Air, of Norwood. She was a tall, gaunt-looking young woman, but did not consider herself much out of health. Her father was living, but her mother had died a

month after removal of a breast for cancer. Miss K—— had various "lumps" about her. In both breasts were cake-like masses of induration, chiefly near their periphery, which were very firm. In the subcutaneous celiular tissue of different parts there were several others. One as large as a fist, but flattened out, was placed over the right deltoid. It was tolerably well margined, adhered to the skin, but was movable on the parts beneath. A little lower down on the same arm there was a distinct hollow, where formerly she said a similar tumour had existed. This hollow had nothing of the nature of a subcutaneous scar, and there was no puckering. It was simply an absence of the cellular tissue. Another lump similar in character to that described was present in the right thigh, and others less definite on other parts. The lumps gave no pain, and there were no enlarged glands.

Her history was that the first lump noticed was in the right breast, and that it had never left her. It had not much increased since she first found it. This was two years ago. Soon after its discovery she was very weak and ill, and had tumours in various positions. She went into the Gloucester Infirmary, and was there under the care of Dr. P—— and Dr. R. B——. She was for some time confined to bed. There does not appear any reason to suspect syphilis, and she has never at any time had any skin disease whatever. She believes that there were formerly small lumps in her scalp, and that they have left "dents," but about this I could not feel sure. She has irregular partially bald patches on the scalp, respecting the nature of which I could not entertain any definite opinion. She has four living brothers and sisters, one of the latter an invalid.

An Example of the Spontaneous Disappearance of New Growths.

Mr. Morrant Baker has informed me of a case shown by Dr. Robert Liveing at the Dermatological Society, to which he thinks, with Dr. Liveing, the term "withering Sarcoma" might be aptly applied. The patient was a young man, in whom six or eight well-marked tumours had successively

developed in various parts of the scalp; one developing as another became shrunken and withered. Notwithstanding the history, Dr. Liveing came to the conclusion that the tumours must be sarcomatous; and his idea was subsequently confirmed. At the end of five or six years one of the tumours developed to a considerable size, and, unlike its predecessors, showed no sign of atrophy. The patient was at this time admitted into St. Bartholomew's Hospital, and the tumour removed by Mr. Morrant Baker. Under the microscope its structure was found to be that of a fibro-sarcoma.

Senile (black) Freckles, in association with Cancer of Skin.

Mrs. W——, an old lady of 70, offers another example of senile freckles in association with rodent cancer, and again the freckles are in proximity with the latter. The ulcer is on the right side of her nose, near the canthus, and is well characterized. The freckles, which are almost black, are on the cheek, just below the outer canthus on the same side. She has a few less marked in other parts. Her skin is in a state of senile atrophy. She is well aware of the freckles, and says that they have been there for several years. The rodent ulcer is more recent, and of not more than a year's duration. She has stigmata in both cheeks. She does not think that she was particularly liable to freckle when young.

Scirrhus in both Breasts, having begun at an early age in right, and slowly progressing.

Mrs. B——, 39, looking younger. Married eight or nine years ago. A miscarriage, but no living children. Six years ago ulceration occurred, and has gradually extended, with satellite tubercles in skin. There was a lump when she married, and had been for some years. It is therefore twelve years since the first lump was noticed.

Now a large, clean, cancerous ulcer, destroying the whole right breast, with an everted edge. It has caused very little pain, but much irritation at times.

A remarkable feature is the close simulation of a rodent edge. It has been called "epithelial cancer," but is clearly

scirrhus. The sore is very clean, and has been kept so by the use of water dressing.

Three Operations for Cancer of the Lip in an old man. Final cure.

In reference to the non-recurrence of cancer of the lip after removal, the case of a Mr. R——, who is now aged 73, is of some interest and value. This gentleman had had a sore twice cut from the left part of his lower prolabium before he came to me with a third recurrence. The sore extended rather widely, but not deeply. For this reason I did not employ the usual V-shaped incision, but destroyed it very liberally indeed by means of the actual cautery. I find it described in my notes of March 12, 1874, as "an ulcer with hard edges, but without papillary growth." In August, 1889, that is, fiteen years later, Mr. R—— came to me again for another disease, and I had the satisfaction of finding that his lip had remained quite sound.

A Case of Rodent Cancer—On Multiplicity of growths in connexion with senility.

Mr. D——, aged 68, is the subject of rodent cancer of his nose. I have repeatedly used the cautery, but it will be necessary to excise the ala. It is a typical rodent. The interesting point at present is that in his left eyebrow, just under a scar from a cut received years ago, a spreading, abruptly-margined patch is forming. The edge is like that of a nævus, consisting of dilated vessels. In its middle is a slightly marked scar. It does not really involve the old scar from the injury, but is near to it.

It may be of the nature of lupus erythematosus, or it may be a variety of rodent. I am interested in it as an example of two forms of serpiginous and malignant action in the same person and in connexion with senility.

THERAPEUTICS, DIET, Etc.

(*Continued from Vol. I., page* 76.)

No. IV.—*Does the presence of Albumenuria forbid the use of Mercury? Dr. Prichard's experience.*

The question as to whether mercury is likely to be injurious in cases in which albumen is present in the urine, is one of much importance to the surgeon as well as the physician. Many surgical complications occur to patients who are the subjects of chronic renal disease, and conditions are often presented in which, were there not a prejudice against it, mercury would seem to be desirable. I have myself chiefly been concerned with this dilemma in cases of syphilis, and have long been in the habit of prescribing mercury without much regard to the state of urine. Nor have I ever seen reason to regret doing so. The following quotation from a Report on Medicine by the late Dr. Prichard, of Bristol (1835), is not without its interest in reference to this question. Dr. Prichard refers to cases in which dropsy was the condition requiring treatment.

"It seems to have been the opinion of Dr. Bright, and the observation was strenuously enforced by Dr. Blackall, that mercury is injurious in all cases of this description. I shall take the liberty to state that this question has been brought to the test of experiment, during several years, at the Bristol Infirmary. In numerous cases of dropsy, with albuminous urine, the treatment advised by Dr. Blackall has been fully tried, and it has failed to produce a cure; but the same cases terminated in recovery under a moderate use of mercurial remedies."

No. V.—*On supposed Oyster-poisoning.*

The Sei-i-Kwai *Medical Journal* (Japan) for August, 1889,

contains a detailed report of an outbreak of supposed oyster-poisoning. Many lives were lost, and in some cases the whole family died. Cats also suffered. The illness was in all cases sudden and acute, attended by nausea, vomiting, griping pains, and hæmorrhagic eruptions. Coma usually preceded death. If the patient survived, convalescence was rapid. Experiments were made by feeding cats on the suspected oysters, and apparently with complete success. The oysters were from a bay which had long supplied them, but the special bed was a new discovery, and had furnished them in unwonted abundance. The epidemic entirely ceased as soon as the oysters were suspected and their use abandoned. The report makes reference to another by Professor Vaughan, of Michigan, in which nearly seventy persons were poisoned by oysters. In both cases the investigators believed that they had succeeded in isolating tyrotoxicon from the suspected molluscs.

It has long been known that under certain conditions mussels may become very poisonous, but the contamination has been supposed to result from their clinging to copper-bottomed vessels. In the case of oysters no such explanation can be offered. The more modern theory is that in both cases a poisonous ptomine is formed. It is said that a complete change of the bed will sometimes enable mussels to rid themselves of the poisonous quality, which latter is due to their being sickly.

No. VI.—*A very severe attack of Lichen Planus —Apparent aggravation of the disease under arsenic, and rapid recovery under tartar emetic with opium.*

The following account of a severe attack of lichen planus, is of interest in reference to the therapeutics of that malady.

Mr. F——, aged 49, was brought to me by Dr. T——, of M——, on July 26, 1887, for an extensive eruption of lichen planus. He was in good health and never before liable to skin disease, except on his elbows. It affected the abdomen, back, and limbs symmetrically. It did not occur

much on the thorax; scarcely at all on the neck, and there was none on the face. The eruption had began on the front of the right wrist and was still most severe there, and there are a few spots in the palms of the hands. The spots were at first a little scaly, and it had been then diagnosed as psoriasis, but they soon become flat-topped and polished. It occurred freely about the navel. He had for years had little rough patches on his elbows which had, he thought, varied with his health. He had never had definite psoriasis, nor had these elbow-patches got worse since his lichen had come, but rather better. The eruption affected the fronts of his arms, but the outsides of his thighs had been exceedingly irritable from the beginning, and now kept him awake most of the night. There was no affection of the tongue or cheeks. Arsenic in full doses and tar solutions were prescribed.

On August 5th the eruption was more copious in the palms. It has been irritated by painting it with strong tar undiluted. There has been distressing itching at night.

On August 23rd the eruption had come out yet more freely, especially on the lower extremities. On the trunk it was still flat-topped, but on the arms it had become diffuse, almost like a dry eczema. It was diffuse on the soles and feet, but not on the legs. It was very erythematous and red, the redness disappearing on pressure. His soles smart and burn, especially in walking; it has itched so much that he could not sleep. An application of tar made it burn for a few minutes, and then for two or three hours he was comfortable; then it began to itch again. The palms of the hands were hard and horny, and the patches were extending. He stated that he did not sleep more than fourteen hours a week. Chloral would give him a good night. He had been a week in bed. His bowels were open, but motions pale. It was a most severe condition, and it seemed clear that arsenic in its present condition did not suit. He could scarcely walk from the tenderness in his soles. The face was still exempt. I advised that he should for a time keep his bed; indeed his state was such that this seemed inevitable. I had on each occasion seen him in

consultation with his family surgeon, Dr. T——, who undertook the details of the treatment.

After the last note I neither saw nor heard anything of Mr. F—— for two years, and as he was worse than ever at the last visit, I felt sure that he had been laid up at home and had probably passed under other care. On April 1, 1890, however, he called to consult me about a sprained knee. Finding that he had been for long quite well of his lichen ruber and that his skin was now perfectly sound, I inquired how he had been cured. He replied that he had soon got well after my last prescription. As my recollection was that he was when I last saw him worse than he had ever been and that the disease showed no signs of yielding, I expressed some surprise. He assured me that he had consulted no one else and taken no other medicine. The eruption had, he thought, faded away in about six weeks after his last visit. Dr. T——, who first brought him to me and who was present at our last consultation, had since died, but Mr. F—— believed that the prescription could be found. I asked him to look it up and send it me. My recollection of it was that we were still pushing arsenic in full doses. The next day I received the prescriptions,* and found that the dates were as follows:—July 21, 1887. Fowler's and Pearson's solutions in doses of four minims each three times a day, and a tar lotion. This prescription was continued regularly until September 2nd, when the eruption being very profuse and exceedingly irritable, it was changed for one containing a quarter of a grain of tartarized antimony and twelve drops of nepenthe every four hours. It was under this latter and after the entire disuse of arsenic that the rapid cure resulted. I was assured that the irritation began to abate directly. It is to be stated also that the solution of tar was at the same date changed for a simple lead lotion, but I cannot think that this had much to do with the improvement.

* Mr. F——, in sending the prescriptions, wrote as follows: "I cannot distinctly remember how long I had to follow the *last* advice you gave me, but I probably carried it out about a month. Kindly note that the eruption gradually died away under the treatment you prescribed, and that I did not take one dose of any other medicine, or apply any other application."

I would by no means claim the merit of the recovery as definitely due to the antimony and opium, although I think it probable that they assisted materially. It will be seen that the doses were large. My reason for giving them so freely was that the skin was acutely inflamed and the patient in a most distressing state from irritation. In saying that I dare not claim for them with certainty the cure, I have in mind other cases in which, after the disuse of arsenic when it had seemed to increase irritation, recovery set in. Every now and then the benefit from arsenic seems to come after it is left off. This is only the case where it has appeared to definitely make the eruption worse; for if during a recovery under its employment it be left off, an immediate relapse is the usual consequence. I have often seen this in pemphigus and psoriasis cases. Probably in the case before us we gained in both ways, both from leaving off the arsenic and from giving the antimony and opium. That the latter remedies agreed well there can be no doubt, for Mr. F—— said that he soon got rid of his skin disease, and that his general health did not suffer in the least.

No. VII.—*Sea-air always disagreeing.*

A gentleman, aged 53, formerly a farmer, now retired, gives the interesting piece of evidence that he is always made worse by sea-air. He cannot even go within a few miles of the sea without beginning to ache in all his joints. He has repeatedly tried, but has always been obliged to go home within a few days. Hill air, on the contrary, always suits him. His most prominent symptoms are an inordinate craving for food, with much stomach flatulence after taking it. His tone is defective, and on one occasion he suffered for five weeks from fainting fits, so that he nearly died. He has been under several physicians, and followed very strictly plans of regimen without benefit. The indication seemed clear that he should live in a hilly district.

MISCELLANEOUS MEMORANDA.

No. VII.—*An Arabian Physician's motives.*

The following impressive sentences are quoted from the preface to Rhazes (Sydenham Soc. edition). Rhazes wrote in the ninth century:—

"In the name of God, the Compassionate, the Merciful. Abú Becr Mohammed Ibn Zacaríyá (Rhazes himself) says: It happened on a certain night at a meeting at the house of a nobleman, of great goodness and excellence, and very anxious for the good of mankind, that, mention having been made of the Small-pox, I then spoke what came into my mind on that subject. Whereupon our host (may God favour men by prolonging the remainder of his life) wished me to compose a suitable, solid, and complete discourse on this disease, because there has not appeared up to this present time, either among the ancients or the moderns, an accurate and satisfactory account of it. And therefore I composed this discourse, hoping to receive my reward from the Almighty and Glorious God, and awaiting His good pleasure."

On the choice of a Physician. An Arabian's plea for post graduate study.

From the same work that the above extract is quoted I take also the following, which may possibly be read with interest by the advocates of teaching for graduates:—

"It is highly necessary to be considered, in the first place, in what manner the physician you intend to choose has employed his time, and how he has spent it in his private studies. If he has been very industrious in a diligent perusal and examination of the books of the ancient physicians, and has carefully read and compared their writings, we may form to ourselves a good opinion of him. On the contrary, if we find he has spent the greatest part of his time in anything rather than in what we have mentioned; if he seems to be much delighted in music, drinking, and other ill habits, we can entertain no great opinion of him. But if it is evident

he has been all along very studious, the next point to be considered is, his genius and capacity, whether he has been very conversant with men able to dispute with and oppose him, and what just grounds we have to think he will ever arrive to the talents of inquiring into as well as of curing distempers. We ought to know, in the next place, what time he has spent in the conversation of those persons we just now mentioned, and whether he has acquired by their means the art of judging of a distemper as well as of relieving it. It will be material, moreover, to observe whether he well understands what he pretends to have studied or no: if we find he does, the next inquiry will be whether he has been used to attend the sick and happy in the cure of them. We ought to be satisfied whether he has practised in popular cities, where there are great numbers of patients as well as of physicians: and if upon inquiry we find that he is well qualified as to both these particulars, we may safely pronounce him an able physician, and to be made choice of before many others. But if it should be found he were failing in *one* of these qualifications, it were rather to be wished he were wanting in the practical part (I do not mean to be utterly unacquainted with at least some part of it) than to know nothing at all of the learning of the ancients. For he that is well versed in and has well digested the writings of the ancient physicians, will with a little help of practice easily attain to what others, who are wholly strange to this branch of learning, can never be able to compass: those I mean who know little themselves, and owe all the little knowledge they have to the long conversation they have had with others who have practised in places where both physicians and sick do abound. But if a pretender to letters sets up for a master without having any learning himself—or if he has some smattering, understands little of what he reads, or at least has not arrived to the use and understanding of his profession, such a one is not much to be relied upon, nor are his abilities to be confided in. Neither is it likely for him to become a proficient in his own way. For it is not possible for a man, though he lives to a great age, to attain to this part of knowledge so considerable in itself, unless he treads in the track of the ancients—the extent of this science far exceed-

ing the bounds of human life: and the same thing is not in this alone, but in many other professions. The authors who have improved this art are not a few, but they are not to be comprehended within the compass of a few years: a thousand writers, perhaps for a thousand years, have been improving this art and profession; and he that industriously studies those authors will, in the short period of life, find out as much as if he had lived a thousand years himself, or employed those thousand years in the study of physic. But if the perusal of ancient authors comes once to be slighted, what can any single person find out, or what proportion can his personal abilities, though much superior to others, bear to the immense treasures of the ancients? In short, he that reads not the books of the learned physicians, nor understands something of the nature of diseases even before he comes to visit, will, when he comes to attend the sick, either through ignorance or mistake, overlook the distemper, because he does not beforehand understand anything of it."

No. VIII.—*On the great value of clinical histories in connection with Museum specimens, and especially with drawings or models of Skin Diseases.*

It is impossible to exaggerate the importance of good case histories in association with specimens placed in museums. To take an example, the names given to many diseased conditions of the skin are still so arbitrary and so subject to vary with the opinions of the godfather or the critic, that it becomes almost essential that there should be connected with every model or plate a concise but detailed verbal description of the case, so that any one inspecting it may have all possible help in forming his own conclusions. This remark is illustrated by the fact that Sir Erasmus Wilson, in his naming of the French models in the College of Surgeons Museum, has ventured, and I think judiciously, to differ a good deal from the Paris authorities under whose directions they were made; and I have no doubt that it will obtain further support from the yet differing opinions of almost every dermatological authority who visits the Museum. It is a great pity that some of these models are named only, and have no clinical

history attached. For my own part I would far rather have a model without any name whatever and with a simple statement, "This eruption occurred in a patient of such and such an age, and under such and such circumstances; was cured, or not, under such and such treatment, and it did or did not recur," than I would accept the nosology of any authority, however skilled and however careful in the use of his terms. A model with an erroneous name and without a history serves only to mislead the uninitiated and to embarrass those who understand the matter, but who under such conditions are able only to meet opinion by opinion without supporting their correction by the appeal to the recorded collateral facts. A specimen with a good history attached is made thereby far more than doubly valuable, for it becomes at once a clinical study almost as useful as that of the patient himself.

No. IX.—"*A Petrified Child.*"

The following extract is taken verbatim from Hall's "Encyclopædia," now a century old. It is clearly a description of a retained fœtus, probably extra-uterine. It might be of interest to know whether the specimen is still in existence. If the description is even approximately faithful, the extent to which calcification had proceeded would appear to have been very unusual.

"Bartholine, Paré, Licetus, and many other writers, give an account of a petrified child, which has seemed wholly incredible to some people. The child, however, which they describe, is still in being, and is kept as a great rarity in the King of Denmark's museum at Copenhagen. The woman who went big with this, lived at Sens in Champaign, in the year 1582; it was cut out of her belly, and was universally supposed to have lain there about twenty years. That it is a real human fœtus, and not artificial, is evident to the eye of any observer, and the upper part of it when examined, is found to be of a substance resembling the gypsum or stone of which they make the plaster of Paris: the lower part is much harder, the thighs and buttocks being perfect stone, of a reddish colour, and as hard as common quarry stone; the grain and surface of this part appear exactly like that of the

calculi, or stones taken out of human bladders, and the whole substance examined ever so nearly, and felt ever so carefully, appears to be absolute stone. It was carried from Sens to Paris, and there purchased by a goldsmith of Venice; and Frederick the Third, King of Denmark, purchased it at Venice of this man for a very large sum, and added it to his collection of rarities. Phil. Trans. No. 285, p. 1400."

No. X.—*New Diseases—A Fallacy.*

Boerhave writes with confidence: "The Venereal Disease began in the Kingdom of Naples since the year 1463, spread itself through the French Army there, from thence through Europe,"—he adds quaintly, "and is still a very common disease."

His commentator holds that it was referred to in Plutarch's Life of Otho. The expression quoted is, however, no more definite than "several diseases that he had contracted by conversing with lewd women," and it may refer to gonorrhœa, gleet, stricture, and the like.

Concerning *Rickets*, Boerhave in his aphorism 1486 thus expresses himself:—

"About the middle of the Sixteenth Century there arose a new Distemper in the Inland parts of England, spreading itself from thence through that whole Kingdom, and all the Northern Regions of Europe, called the Ricketts, now-a-days a very common Disease."

It is well to bear such statements as these in mind when we are investigating other questions as to asserted new developments of disease. If there is one malady which takes precedence of others in the probability that it has afflicted the human race from its beginning, it is Rickets, for it occurs in the lower animals also, and is essentially connected with damp dwellings, want of sunlight, and poor food. It is improbable that it ever had any sudden accession or material increase. Similar rumours are encountered as to the spread of Leprosy by the Romans, and subsequently by the Crusaders. Probably it as well as rickets was indigenous to many districts. All definite maladies appear to become more common as soon as they are well described and taken notice of.

PLATE XVIII.

ARSENIC-PSORIASIS AND KERATOSIS.

The back and front surfaces of the hands of Mr. D——, the patient whose elbow is shown in the next Plate. It will be seen that across the knuckles of the hand a number of dry, thick, scaly crusts have formed. On the backs of the fingers there are numerous little pits where the epidermis is broken, while the skin generally is discoloured and harsh. The patches across the knuckles are exactly like psoriasis, excepting, perhaps, that there is more thickening beneath the crusts. They do not occur precisely in the parts where psoriasis is most common, that is, on the back of the hand, rather than the knuckles. The palmar surface of the hand shows the epidermis dry and cracked, and there are numerous little pits where it has been broken. The extremities of the fingers are especially affected and somewhat reddened. It has been difficult to represent the little corn-like patches of thickened epidermis which were present.

PLATE XIX.

ARSENIC-PSORIASIS.

The Plate shows the elbow of a gentleman whose hands are delineated in Plate XVIII. It will be seen that the whole skin is of a dirty brown tint, and that a large scaly patch has been developed near to the elbow. This patch was quite dry, but it was somewhat less circumscribed, and showed more of redness about its edges than common psoriasis usually does. The patient had a perfectly healthy skin previous to the administration of arsenic.

The arsenic had been given in the hope of arresting a malignant growth.

PLATE XX.

ARSENIC-KERATOSIS.

The palmar surfaces of the two hands of Dr. W——, who became the subject of arsenic-cancer. It will be seen that the palms are exactly like that of the hand shown in Plate XVIII., but with the addition of a fungating growth in each. That in the right palm is of considerable size and thickness, and is placed just above the wrist. That in the left is much smaller, having been of more recent development, and shows only a reddened excoriation between the index and middle fingers, beneath which there is a certain amount of thickening. In this case common psoriasis had been present in the first instance, and arsenic had been given in large doses over a long time for its cure.

After this portrait was taken, Dr. W—— had his right hand removed by amputation through the forearm. He died within a year, with recurred malignant growths in the glands and viscera. The form of cancer was a modification of epithelial.